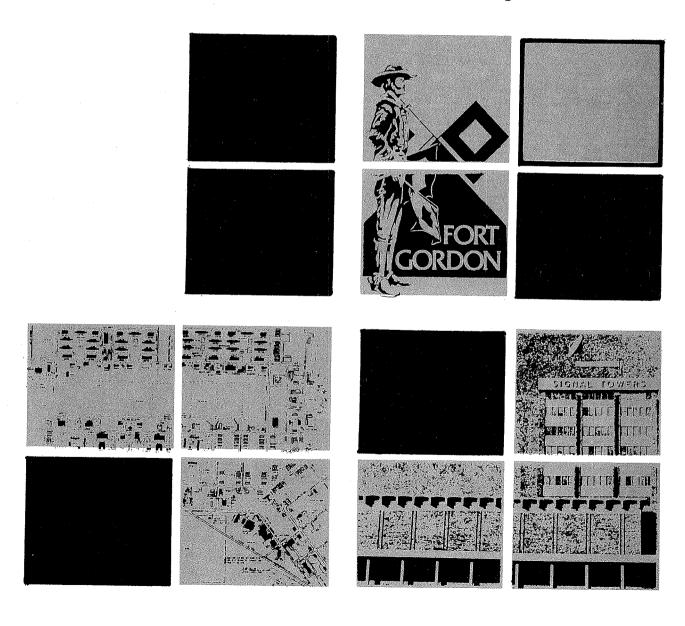
# INSTALLATION DESIGN GUIDELINES Fort Gordon, Georgia

# **Executive Summary**



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**Executive Summary** 

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## Prepared by:

Laubmann-Reed & Associates, Inc. 505 Tenth St., N.W. Suite 200 Atlanta, Georgia 303 18 (404) 872-2459

(404) 0/2-2459

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## REPORT SUMMARY

## This Study

PRESENTS BRIEFLY, THE FINDINGS OF THE EXECUTIVE SUMMARY STUDY FOR THE INSTALLATION DESIGN GUIDE PROGRAM

IDENTIFIES THE EXISTING ASSETS AND LIABILITIES OF THE VISUAL ENVIRONMENT OF FORT GORDON

PROJECTS THE VISUAL THEME THAT ALL PLANNING DESIGN AND MAINTENANCE EFFORTS ARE TO WORK TOWARD, FOR THE POST

PROPOSES A PLAN OR SERIES OF ACTIONS TO ACHIEVE THAT THEME BY IMPROVING THE VISUAL ENVIRONMENT OF FORT GORDON

The accompanying 'Executive Summary' gives an overview of the past, present and future development of the visual environment of the installation. It is both a review of the Post's many areas, facilities, history, climate, occupants and ongoing studies, as well as an <u>Outline of Programs</u> to create an overall, unified visual image at Fort Gordon.

The 'Installation Design Guide' is a listing of <u>Specific Design Criteria</u> that is to standardize the planning and design of the four basic elements of the built environment, site features, buildings, spaces, and systems.

# The Principal Findings of This Study Show

- 1. That Fort Gordon has for some time and continues to be in a period of transition from a 'temporary' to a permanent appearance. That the opportunity to effect uniform architectural, planning and site development standards has not been taken as of yet.
- 2. That having been the case at other military installations, the overall planning, design, and construction process is fragmented and lacks a central authority. That the responsibilities and powers of the D.F.E./D.E.H. have been slowly eroded by a variety of processes that occur both on Post and from outside sources. Such as, the design of national 'Standard' buildings by DoD, or regional 'Standard' design elements used by agencies such as the Corps of Engineers that do not always fit the visual appearance needs of the Installation.
- **3.** That as a result of this fragmented process, the design of facilities has been haphazard and done as a series of architecturally unrelated projects. The site selection and overall planning has however been somewhat effective due largely to the original strong circulation and building layout of the Post.
- **4.** That the overall treatment of site elements has not been coordinated and that the quality of the grounds maintenance needs to be improved.

#### RECOMMENDATIONS

- 1. It is recommended that the total master planning and design process be reviewed and that consideration be given to upgrade or establish a sole authority for all standards and planning recommendations. Also, this organization is to be considered for inclusion at the general staff level.
- 2. It is recommended that this sole authority promote a master development plan and accompanying standards, particularly architectural standards, that will be flexible enough to accommodate the individual structures and small area plans that are to be developed in the future.
- **3.** Finally, it is recommended that the initiative be taken to upgrade the grounds and roads, in general, in a series of development projects that are not site or facility specific. This means Post-wide systems for signage, landscaping, street furnishings and others.

# THE PRIMARY IMAGE MAKERS, OR ASSETS OF FORT GORDON INCLUDE:

Signal Towers
Barton Field
The organized, simple vehicular circulation system
The plateau or ridge site of the Post
The spatial arrangement of land uses in consolidated, identifiable districts

# THE PRINCIPAL OPPORTUNITIES FOR IMPROVEMENT, OR LIABILITIES OF FORT GORDON INCLUDE;

The lack of an identifiable uniform architecture
The lack of uniform site furnishings or signs
The erosion and continued loss of landscape materials, turf and
particularly of tree cover, at this open exposed Post
The dominance of motor vehicles in what is essentially a campus or
pedestrian oriented environment
The lack of a strong central planning authority
The lack of a central administrative core

## Themes and Images

The theme of Halls for Learning - Landscapes for Living should project a sense of unity, permanence and of organization. This very important educational and training facility should leave the user with the impression of a well run, efficient school organization. All design and planning efforts should promote this image.

To begin work toward this desired goal, three basic types of actions are required:

- 1. MAINTENANCE METHODS AND SCHEDULES THAT IMPACT THE GROUNDS AND BUILDING EXTERIORS ARE TO BE REVIEWED
- 2. UNSIGHTLY OR INCOMPATIBLE DESIGN ELEMENTS ARE TO BE REMOVED, RENOVATED REPLACED OR SCREENED'
- 3. DESIGN AND PLANNING STANDARDS IN THE 'INSTALLATION DESIGN GUIDE' ARE TO BE IMPLEMENTED IN ALL NEW WORK ON POST

These three actions, program review, physical rehabilitation and the use of standards are coordinated through the D.F.E./D.E.H. or through another sole authority in compliance with the stated visual theme of Fort Gordon and guided by the master development plan.

## The Plan

To begin to achieve the stated image, and to correct the unattractive conditions that now exist, a series of goals must be accomplished. As each task is completed, a strong, unified and organized Fort Gordon will begin to emerge. These goals are presented in order of their effectiveness.

#### GOALS:

- 1. Project a strong sense of entry
- 2. Establish a strong graphic image
- 3. Improve the quality of the landscaping
- 4. Reduce the general clutter
- 5. Establish a master tree canopy/wind break program
- 4. Establish a system of open spaces
- 7. Establish small area identities
- 8. Establish a Post-wide organization of space

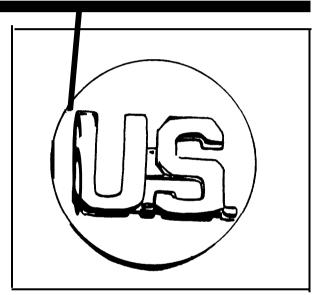
In the short term there are cosmetic improvements that will have an immediate impact on the visual environment. These cosmetic improvements involve items such as landscaping, arrangements of building groups, open space, parking, and circulation systems, as well as the creation of a uniform architectural image, will shape and organize the diverse functions of Fort Gor types of actions are required.

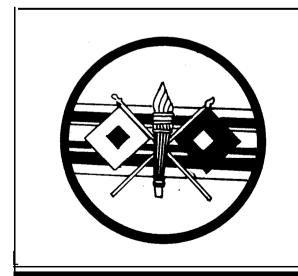
As these Post-wide goals are completed, and the ongoing programs are established to preserve them, a series of reviews will be necessary. Maintenance methods, design processes, and adopted plans are to be reviewed regularly to insure that the overall Post layout and development process continues to respond to the ever changing mission requirements of this important training installation at Fort Gordon.

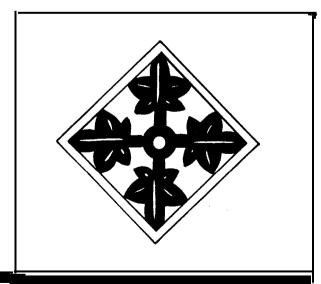
# **PART I**

# **GENERAL OVERVIEW**









## 1.

# Introduction

## **Purpose and Scope**

The primary goal of this study is to create a set of Design Guidelines for the design and planning of Fort Gordon and the United States Army Signal Center. Specifically, a series of design standards and planning criteria are to be established for use by in house as well as private sector individuals who will have some part in the determination, location, planning, design construction and maintenance of any exterior design elements at Fort Gordon.

Information is presented for Post-wide elements and systems, and for each of the six land use zones of:

Administration Community Facilities Housing Industrial Open Space Mission Support

For Post-wide concerns, the various pertinent design elements are addressed and standards for the several design disciplines are stated.

For the land use zones, specific tasks and goals are outlined in order to achieve the stated themes for each.

## **How This Report Works**

This Executive Summary is a statement of the findings of a series of studies performed by a team of landscape architects, planners, designers and architects. The studies performed include an assessment of existing exterior visual quality, user groups and patterns, climate, on going programs, maintenance practices, and of the processes and systems that have caused Fort Gordon to look like it does today.

The findings and an outline plan of goals and objectives is presented first in Part 11. This section includes discussions of the existing assets and liabilities on Post as well as a listing of priorities that will improve the overall visual environment. Also proposed will be a series of themes or images for the Post as a whole and for the separate land use zones at Fort Gordon.

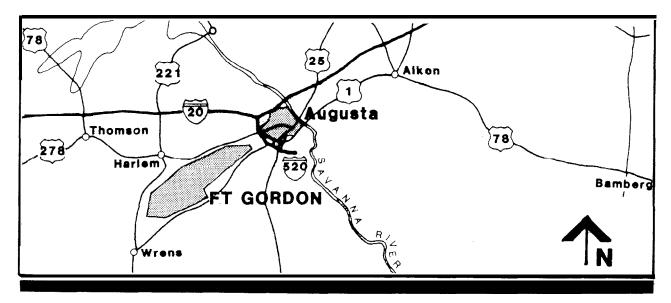
A companion document, the Design Guidelines establishes specific design and planning criteria for all future development, both new and renovation, to be done at Fort Gordon.



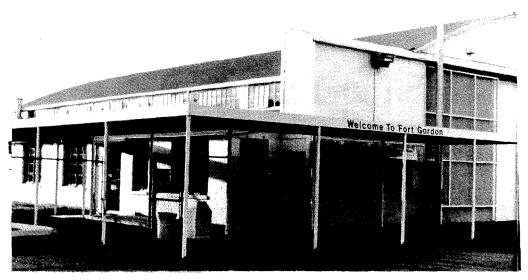
# 2. Fort Gordon and the Piedmont Region

## Location

Fort Gordon is located in the lower Piedmont Region of East Central Georgia, near the Fall line, a transition zone between the Piedmont and the Atlantic Coastal Plain physiographic provinces. The Post is approximately nine miles southwest of Augusta, it covers 55,000 acres consisting of steep slopes and wooded ravines surrounding the plateau that holds the 4000 acre cantonment. Due to a sparse tree cover, large areas of the cantonment are visible from any vantage point on Post and from many areas off the reservation. The moderate climate and varying terrain makes this area well suited for field training which complements the teaching and classroom activity that occurs at Fort Gordon.



The Post is accessed by U.S. Highways 1 and 78 from Augusta, Georgia. Both highways are four lane from Fort Gordon to Augusta and intersect the Bobby Jones Expressway (I-520). I-20, running north of the installation, is the region's major link to both Atlanta, Georgia and Columbia, South Carolina. Bush Field is the airport facility for the Augusta region and is located 10 miles east of Fort Gordon. The Post maintains a small facility at Bush Field which serves as a point of first impression for visiting dignitaries and other personnel.



Augusta and Fort Gordon enjoy a close relationship. Many activities held on Post are attended by the townspeople, with the Post supplying color guards and military bands for area parades and special events. The local community has always considered Fort Gordon as an important resident and integral part of the Augusta area.

## Mission of Fort Gordon and U.S.A.S.C.

Fort Gordon, home of the United States Army Signal Center (USASC), is a U.S. Training and Doctrine Command (TRADOC) installation. Fort Gordon's mission also includes command and support for Forces Command (FORSCOM) activities, units and sub-installations. Additionally, training of Reserve Component forces is conducted here.

The Signal School trains soldier-communicators in the installation, operation, and maintenance of modern military communications-electronics equipment, an area that continues to rapidly increase in importance in military capabilities. Signal Corps career and specialist signal training for both officers and enlisted personnel from all components of the Army is provided by the Signal Center and Fort Gordon. This post is the largest communications and electronics training facility in the free world.

## History of Fort Gordon and U.S.A.S.C.

Fort Gordon was established in December of 1941 as Camp Gordon and was originally constructed as a Triangle Division Camp. The first building, constructed as a set of two on base, was number 2050. The Post was originally laid out on formal grids north and south of a massive parade ground known today as Barton Field. The Post administrative functions were located as the focal point at the east end of this large space. This mall was designed for the parade of the armored units originally stationed there. commissioned for active duty and charged with preparing American servicemen for war in Europe. Temporary wooden barracks were vigorously constructed almost overnight to house the trainees. This initial rush construction was completed by the middle of 1942 and some of these structures still exist today.

Fort Gordon's history contains a variety of command assignments and changes in the military service roles based on both the shifting tides of American obligations and position of the military throughout the world. The Signal Corps was established at Camp Gordon in 1948 and in 1956, the installation became Fort Gordon. In June of 1962, after several reorganizations, all activities at Fort Gordon were combined under the Southeastern Signal School.

The skyline of Fort Gordon changed dramatically from 1964 to 1975. The Southeastern Signal School complex, enlisted mens barracks, and the medical complex with barracks were all built during this period. Many of the white buildings were removed to make way for these modern permanent structures, but the original street layout and plan were virtually left intact. The Signal Tower was built during this period and was located north of Barton Field about half way down its massive length. This single building is the dominant landmark of the Post and has become the major image generator for Fort Gordon.

Today, Fort Gordon and the U.S. Army Signal Center, with their mix of modern and W.W. II buildings, train more soldiers than any other branch training center of the United States Army.



# Visual Survey

## **Current Land Use**

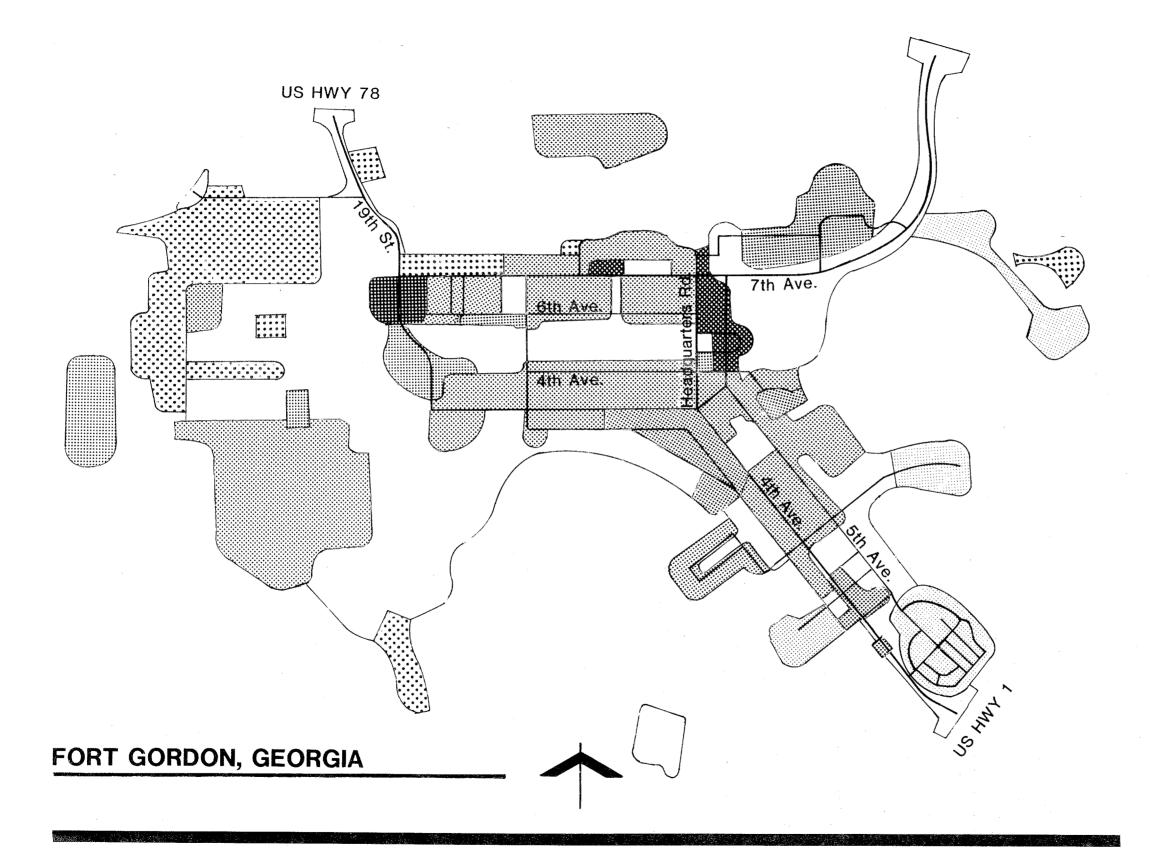
Fort Gordon consists of eight geographically related land use areas as described in Part I. Most areas are a mix of temporary and permanent structures bounded by the original street patterns established originally in 1941. No one architectural style persists, which presents a confusing and uncoordinated image to the user.

The period of transition that Fort Gordon is now experiencing offers a series of opportunities to permanently affect and establish the 'look' of a well designed, coordinated Post.

## Land Use Zones

Within the eight geographical land use areas, six basic land use zones occur.

- Administrative Post-wide and unit headquarters and Post support offices.
- 2. Community Facilities Institutional, recreational, service and commercial facilities.
- 3. Housing Single family, duplex and multi-family units.
- 4. Industrial Warehousing, motorpool, production, hardstands and utility facilities.
- 5. Open Space Recreational, ceremonial, parking and roadway areas.
- 6. Mission Support Barracks, classrooms, dining halls and training facilities.



# LAND USE ZONES

## **LEGEND**

ADMINISTRATION

COMMUNITY FACILITIES

MISSION SUPPORT

HOUSING
OPEN SPACE

INDUSTRIAL

Due to the anount of change which takes place regularly at Fort Gordon many of these functions are now taking place in buildings that were originally designed for an entirely different purpose. As such, these areas do not project the image or theme of the function which occurs there. Rather, the visual image is determined by the combination of architecture, site planning and landscaping which exists there. In some cases, isolated buildings may reflect their current function but are not supported by a sufficient number of similar buildings to be considered to have a theme of a distinct land use zone. In these cases, they have been lumped together into the larger theme which exists in the area, further adding to the confused impression users receive from the Post.

## **Architecture**

### POST-WIDE ARCHITECTURE

The architectural character of the buildings at Fort Gordon can be divided into two distinct types. The first type is represented by the temporary WW II, one and two story wood frame structures with gable roofs and tall chimneys. These are scattered throughout the Post, mostly on the south side. The second type 1s represented by contemporary/modern single to multi-story structures, with flat roofs. The typical exterior materials are brick masonry and aluminum sash windows, with some variations in brick and accent colors. In most cases the designs have relied upon mechanical, energy intensive methods for cooling and heating. They have not been responsive to the hot humid climate of the region.

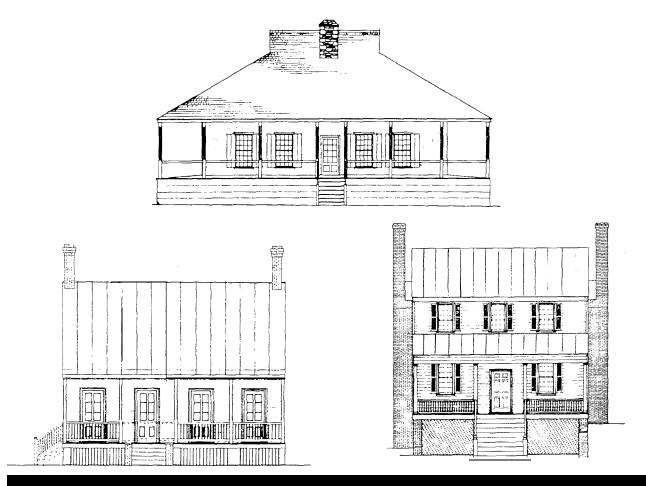




#### REGIONAL ARCHITECTURE

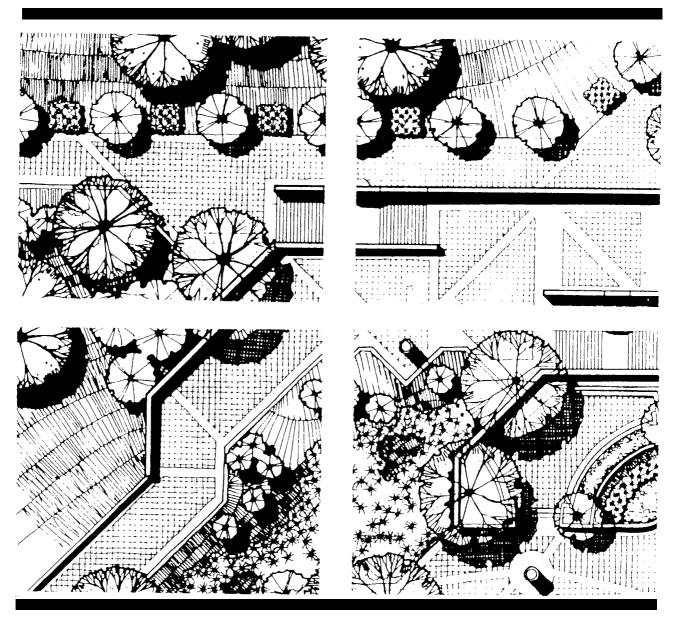
A common set of architectural elements is evident in the Augusta area. These elements create a regional architecture which has been called the "Sand Hills Cottage" style. Key elements of this style include open hallways, high ceilings, covered shed roof porches, large attic spaces and light colored exterior finishes. These architectural elements were developed in response to climatic conditions of the region, namely hot and humid summers and mild winters. Many of these elements have been lost in the 'utilitarian' style, all purpose architecture of Fort Gordon.

The "Sand Will Cottage" style is typified in two closely related types of farm houses. The first (typical of the pre-revolutionary period) is a one-story or a story and a half clapboard wood frame structure with central hallway, gabled roof, and dormers in the attic. The roof line sloping down to the front includes the front porch. The second type of farm house is characterized by two story wood frame structure with conventional central hall plan, gabled roof, dormers in the attic, chimneys usually located on outside walls, and one story shed roof porches at the front and rear. These porches have simple square posts and balusters. The ornamentation for both building types was kept to a minimum, but the dominant architectural theme was one of an open, airy series of porch and interior spaces.



# **PART II**

# **VISUAL IMPROVEMENTS PLAN**



## 1.

## **Assets and Liabilities**

## Introduction

Fort Gordon, the home of the U.S. Army Signal Center School, is the physical result or product of a series of naturally occurring and planned events. Long before the site was selected for use as a military reservation, natural forces shaped the land and altered the plant life forming a broad, cleared plateau of poor soils and a stunted mixed hardwood/pine woodland, dotted with small subsistent farms. Recently, the shape of this flat east/west ridge allowed planners of the Post to quickly impose a formal grid layout of streets and utility lines during the early hectic days of W.W. II. A similar arrangement was possible as the Post expanded to the southeast along 4th Avenue.

The architecture was equally utilitarian and continues to be so today with few notable exceptions. Most of the designed items of Fort Gordon give little attention to aesthetics, but as a whole, the Post presents a good image through a few well designed key spaces, effective level of maintenance, and good circulation. The spaces, their arrangement and the current period of transition from temporary to permanent status that the Post is now experiencing, provides an excellent opportunity to create a very positive image that is expected from this premier communications school. But the situation is dynamic and the possibility of serious, long term negative impacts is present.

The physical appearance of Fort Gordon is the result of many different ongoing processes. In some cases, the result or product is considered to be a valuable and attractive addition to the overall visual environment. A good example of this can be seen in the consistent use of a well designed and

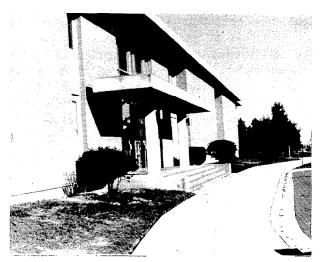
coordinated sign system. It is a system that is a bit limited, somewhat simple, and still permits a number of non-standard signs. This system of signage however, is the product of a conscious, determined decision and design process that was made several years before the benefits began to appear.





Conversely, a condition that is considered to be unsightly is only the symptom of a faulty or unstructured process. An example of this, one that has very long term implications, is in the selection of brick and exterior surface materials for permanent buildings. The lack of a clear policy or set of standards has led to a mix of brick types and sizes that do not complement each other, do not respond to the regional architecture, and require a number of different maintenance and repair capabilities.





In each case, conscious design decisions were made. One was planned, coordinated and successful while the other was a series of undirected, individual efforts that have led to an unsightly situation on Post. Not all such efforts are as far reaching as each of these examples but the combined total of all design decisions make up the physical elements of Fort Gordon.

## **Process Elements**

At the Installation, there are a number of ways, or processes for the determination, funding and design of facilities and infrastructure. This situation is the result of a long standing lack of planning and design policy, and a loosely defined Master Development Plan that is subject to frequent and easy change. The thought and design effort that goes into individual facilities is much better controlled by the planning authority on Post than are those efforts for the Post as a whole.

The study provides only the frame work for establishing design standards at Fort Gordon. Also needed is a strong Master Development Plan with attendant Small Area Plans for the development of specific identifiable sections of the Post. The responsibility for developing these plans and the central authority to regulate changes proposed by all factions on Post must be placed under a single planner or group. This authority should be insulated from the day to day administrative tasks and demands that the D.E.H. staff and Post Master Planners now have to contend with. The authority must be allowed to concentrate on developing and promoting these plans.

The duties of this group should be strictly to create and promote the Master Development Plan for the Post and to establish design, maintenance and renovation standards for all work to be done on Post. This single administrative authority should act as a clearing house, to review and make recommendations on the approval of given designs, and to assist the designer in understanding the available standards or options. The overriding aim being to maintain an established visual theme or image for the Post, over time. authority should also be involved with the selection and training processes for maintenance personnel and civilian contractors, as well as the creation of job specifications and techniques. Currently, the Directorate of Engineering and Housing, is supposed to do this, but a variety of other design/build processes have encroached, and it's sole authority has been slowly eroded.

## **Physical Elements**

Design elements give a location its form, character and image and these elements are constantly modified by change and growth. This change can be slow, almost imperceptible, such as the growth of shade trees over many years, or it can happen quickly and with great impact, such as the construction of a building complex. Although, change at Fort Gordon has been steady over the years, the design elements that have shaped its image have not always been applied in a thoughtful or unifying manner. To better shape the future environment of Fort Gordon, these elements need to be identified, analyzed and controlled from a design, functionality and maintenance standpoint.

Each of the six Land Use Zones is made up of a series of design elements arranged in an unlimited number of combinations and introduced over a long period of time. Overall appearance can be affected in two ways. First, the chosen element can be unattractive, or out of scale or proportion. The second way a design element can affect appearance is in where it is used in relation to the other elements of the place. Is it in keeping with its surroundings?

These design elements can be grouped into four basic types and each element type has a similar impact on overall appearance. Each of the four types will now be considered.

### SITE ELEMENTS

These are the major unifying items that can over time, carry an image throughout a large varied installation without conflicting with the diverse functions of the place. They include:

- Site furnishings, such as benches, transformers, light poles, guard rails, phone booths, bus stops and other utilitarian items.
- Landscaping, such as lawns, street trees, foundation plantings, ground covers, screens and other unifying plantings.
- Signage, which offer directions, information or designations.
- Lighting, for the purposes of safety, security, definition of a space or path or to display an attractive feature.

#### SPATIAL ELEMENTS

Often thought of as left over spaces between the nodes of activity, these outdoor areas provide the visual settings for the site and structural elements and include:

- Open space, more recently created only as recreation, training areas or as cleared land from the demolition of older buildings.
- Plazas and courtyards usually are associated with one or more buildings, and serve as a transition or entry area, or as a gathering place for people.

#### STRUCTURAL ELEMENTS

The locations or nodes of the various activities of the Post have a great visual impact, but cannot easily be uniform in appearance, They are:

- Buildings, in sizes and scales of all types and uses, each being a node for a set activity and having specific design requirements.
- Utility structures such as water towers, training sheds, electric substations, sewer and water plants and other required items.

#### SYSTEMS ELEMENTS

Transportation of users through the spatial landscape is the main function of these items. They exist on several levels of scale and include:

- Roadways, which allow vehicles to move from node to node and connect Fort Gordon with off base areas.
- Parking, which is a specialized part of the roadway system used for storing vehicles and which often conflict visually and physically with all other elements.
- Walkways, or the paths that connect the road system to the spatial and structural elements and provide an alternate but smaller scale method of moving from node to node.
- Bikeways, a system that has been largely ignored at Fort Gordon that can be used to reduce the visual impact and future demands of the road and parking systems.
- Utility systems, which have the visual impact of site furnishings, but function to reduce the need for transporting users from node to node.
- Color systems, which provide the background treatment for all other elements, serve to highlight desirable features or hide unwanted ones, and which can provide overall visual interest to the general landscape.

What the element is and how it is fitted into the Post as a whole, and its site in particular, is the physical visual result of the design process.

## Assets and Liabilities of Land Use Zones

Fort Gordon has a number of definite characteristics that offer opportunities and constraints to the designer. Many of these conditions are specific and pertain only to a single Land Use Zone, while others are Post-wide and more general in nature. The following is a list of these conditions.

#### POST WIDE ASSETS AND LIABILITIES

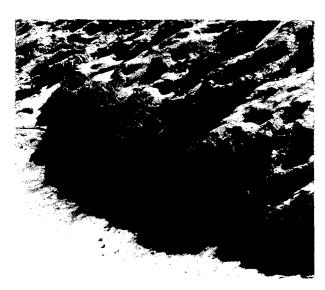
Elements that affect the Post-wide visual environment include:

The existing slopes and soils of the Post have the . . .

Asset of; generally being of flat or gentle slopes that present few retention problems.

Liabilities of; being high in sand content and very susceptible to erosion when disturbed; being of very low fertility for plant growth; having a low water holding capacity; losing their turf cover under moderate foot traffic in areas where hard surface walks are not available (Many such dirt paths are visible on Post); eroding and washing onto walks and depositing heavy silt loads into the storm drain system.





The existing entry ways to Fort Gordon, Gates 1, 2, 3, and 5, and the air terminal at Bushfield, have the . .

Assets of; being well located in relation to the main activities and areas of the Post; being fairly well landscaped or running through attractive wooded areas; enjoying a high level of maintenance appropriate for each type of entry; having room for expansion throughout most of their lengths.

Liabilities of; being improperly or over maintained, a condition that has led to noticeable erosion and plant loss; having large obtrusive drainage structures; having gate houses that are not coordinated with the architecture of the Post; deteriorating or being cluttered with unsightly structures along the arrival sequence; being open to possible future development along their routes.

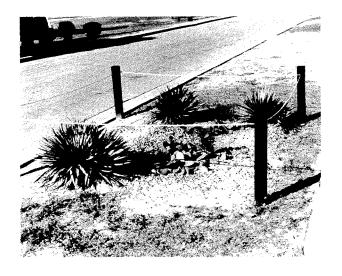




The existing vegetation and landscape materials on Post have the  $\dots$ 

Assets of; having a number of high quality native trees well established throughout most areas; being fairly open and well drained.

Liabilities of; having soils of very low fertility; being in an open, exposed and harsh climate situation; being maintained by an overly aggressive labor force; in many cases being improperly maintained; using plants that are non-standard and poorly suited in their various applications.

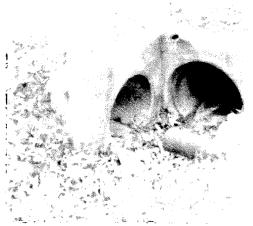




The existing surface drainage system has the . . .

Liabilities of; being over-engineered, obtrusive, and in many cases causing unsafe conditions; having a high visual impact and requiring a number of unsightly pedestrian bridges and driveways.





The existing road circulation system and general layout of the Post has  $\underline{\text{the}}$  . . .

Assets of; being efficient with few points of congestion; being well marked, having an apparent hierarchy, and being well maintained; having the various land uses in a compatible and practical arrangement generally with few conflicts or little need for reorganization.

Liabilities of; having some important accommodation and school areas in remote locations that make pedestrian access impractical; mixing some land uses as occasional small pockets that do not conform, being at a point in the development of the Post that capacities have been reached in many areas.



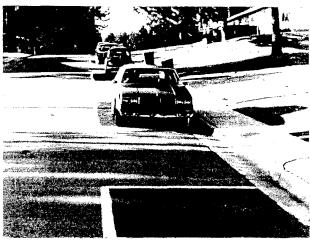


The existing parking facilities on Post have the . . .

Asset of; being broken up into a series of smaller, human scale lots.

Liabilities of; having insufficient spaces in high density areas; in many cases being unpaved makeshift lots; being in high visability, unscreened locations; often being located under groves of established and valuable trees, putting them under additional stress; being located along streets and roads in unsafe arrangements.





The existing sign system on Post has the . . .

Assets of; having been standardized in recent years and beginning to emerge as a unified, visually improved system; being current and easily updated by in house labor.

Liabilities of; being built of a low design quality and utilitarian materials; being incomplete in it's scope, allowing many non-standard and often poorly made signs; having no provisions for many types of signs or temporary events; being inconsistent with the approved official D.A. Sign System; having a difficult to read building numbering system in some areas.

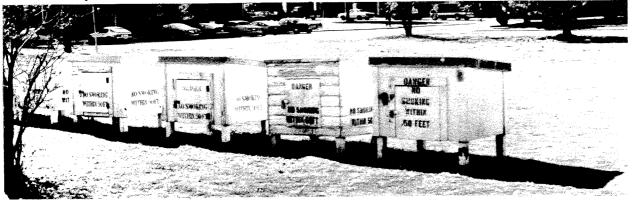




## The existing general appearance of the landscape has the . . .

hsset of; having little incidental clutter and being generally clean and well maintained.

Liabilities of; having a number of uncoordinated poorly designed, unattractive elements scattered and visible throughout the Post, including, paint storage sheds, bus shelters, mechanical equipment, gas tanks, dumpsters, recycling bins, trash cans, benches, tables, retaining walls, pedestrian control devices, utility structures, monuments, bike racks, and signs; having an uncoordinated color scheme; having overhead wires in areas of high visibility; having many unscreened service and dumpster areas many of which are highly visible.

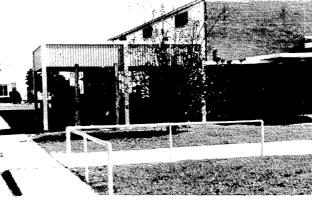


The existing architecture of the Post has the . . .

Assets of; being in a period of transition from temporary to permanent structures; providing the Post with it's strongest single image maker, Signal Tower.

Liabilities of; being utilitarian in design with little regard to local regional architectural styles, or the climate considerations which shaped that architecture; being a diverse mix of styles and having a variety of brick types and other exterior surface treatments; having an uncoordinated color system; in some cases being of designs that were difficult to construct and maintain.





#### LAND USE ZONES ASSETS AND LIABILITIES

Assets and liabilities also exist in each of the six land use zones and are more specific in nature. They should include for . . .

Administration areas, the assets of . . .

- Being the point of entry or first impression for visitors.
- Providing monumental scale or landmarks as in Signal Tower.
- Occupying the central or dominant space of the entire Post or a group of buildings and establishing that area's visual theme.
- Being consolidated in a single compound of administrative functions.

But, at Fort Gordon, have the liabilities of ...

- Being scattered into several areas of the Post.
- Having a low identity in older "temporary" buildings that are lost in the general fabric of the Post.
- Having the Signal Tower, the Post's primary image generator, located in and appearing to be a part of the school complex.
- Receiving the same low level of landscape design and grounds maintenance that surrounding areas receive.
- Having insufficient and poorly located parking.





Community facilities, the assets of . . .

- Being the gathering areas of community contact for services, shopping recreation, or social events, these are people places.
- Being centrally located and enjoying high visibility and access.
- Being the center of social activity after normal working hours and on weekends.
- Enjoying a high degree of maintenance and grounds keeping.

But, at Fort Gordon, have the liabilities of . . .

- Being well located but having a poor arrangement in relation to one another and being open and exposed to the elements.
- Having poor pedestrian and vehicular circulation with many conflicts between the two.
- Having no true parks or usable passive outdoor use areas for social activities.
- Being of a diverse and mixed architecture.
- Being poorly maintained and having a utilitarian, cluttered look.
- Missing a few key elements such as a major auditorium or stadium space for special events.
- Having service clubs with barren, poorly laid out, unappealing exteriors.





Housing areas, the assets of . . .

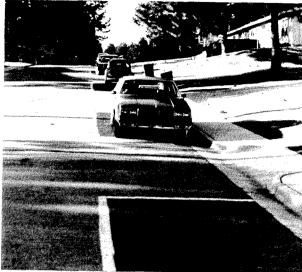
- Providing a setting for social interaction among residents.
- Having a sense of neighborhood.
- Being located away from the more active commercial and industrial areas.
- Having attractive small scale community use areas such as playgrounds and open spaces.
- Being well landscaped with open and shaded areas.

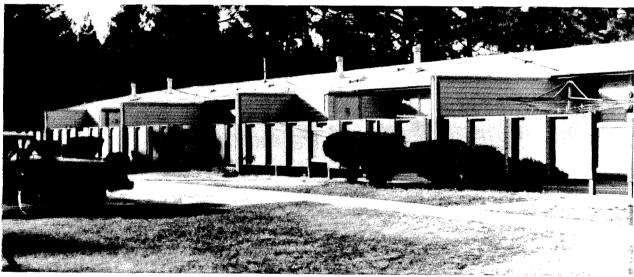
But, at Fort Gordon, have the liabilities of . . .

- Having few and poorly done small scale neighborhood playgrounds, parks or open spaces.

- Having poorly located utility connections and hookups.
- Having inadequate and poorly designed parking in many areas.
- Having some poorly designed and unattractive entry area screens and fences.





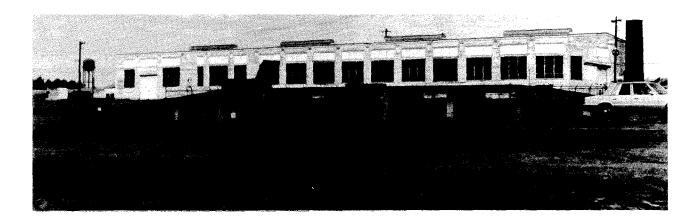


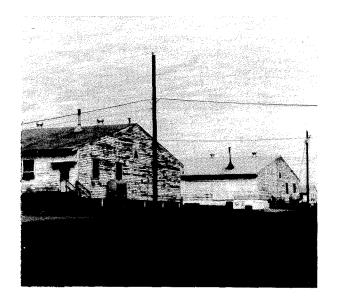
Industrial facilities, the assets of . . .

- Being grouped together in large areas of similar activity, that can be located out of or easily screened from view.
- Requiring a low level of routine grounds keeping if properly laid
- Being fenced and secure with few points of entry or interaction with the community at large that require increased landscaping.

But, at Fort Gordon, have the liabilities of . . .

- Being located at a number of areas on Post and in some cases being of high visibility adjacent to high use areas. (Notably the hardstand areas).
- Being of older, temporary buildings that are difficult to maintain and are energy inefficient.
- Having an over abundance of industrial spaces due to the earlier historical uses of the Post.
- Having few clear points of entry.





Open spaces, the assets of . . .

- Being the foreground for desired close and distant views.
- Being the location of central visual features such as memorials, foundations and sculptures.
- Having the character of outdoor "rooms" for a variety of human activity.
- Being green and inviting.
- Being able to connect visually dissimilar buildings and tie together different areas of the whole place.
- Having high visibility.
- Having a number of excellent, well located spaces.

But, at Fort Gordon, have the liabilities of...

- Having some very strong formal spaces that have not been developed to anywhere near their capacity as important image makers for the Post.
- Having been encroached upon over the years by a variety of uses.
- Being thought of as unused space and available for development.
- Being poorly landscaped.
- Having no organized system.
- Lacking well developed, passive use areas, and small human scale spaces.
- In the case of Barton Field, being too large and being poorly used, thus presenting safety and maintenance problems.
- Being ignored as sites for many memorials and monuments.
- Being subjected to unskilled, 'force account' maintenance efforts.
- Having recreation facilities of low design and maintenance quality.



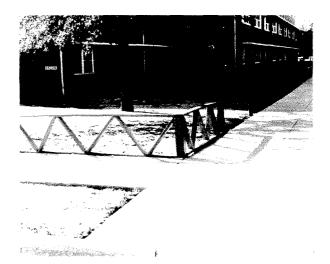


Mission support areas, the assets of . . .

- Being used regularly and enjoying a high degree of basic maintenance.
- Providing areas of daily activity.
- Being the location of involvement by the largest number of persons on Post, giving it a high level of visibility.
- Being a unifying element through standard design and its presence throughout the Post.

But, at Fort Gordon, have the liabilities of . . .

- Being in a variety of building types with varying identities, and maintenance needs.
- Having the highest population densities on Post, which increases the problems of use on the grounds.
- Being poorly landscaped.
- Having insufficient and poorly designed paved walk systems.
- Having many non-standard, make shift site elements.
- Having inadequate or poorly located parking.
- Having a high level of general clutter.
- In some areas, having little room for expansion.
- Having serious conflicts between vehicular and pedestrian circulation. (Notably along 7th Avenue).
- Having a variety of unsightly pedestrian control devices and a number of unpaved dirt paths.





## 2.

# **Visual Improvement Priorities**

## Introduction

The plan to improve the visual environment of Fort Gordon requires that a series of actions be taken to alter certain conditions which now exist on Post. These actions will occur as one of three basic types.

- 1. A review of and improvements to current maintenance practices
- 2. The renovation or removal of unsightly conditions
- 3. The adoption and implementation of planning and design standards

Each of these actions will be required to respond to certain Small Area Plans which in turn respond to the Master Development Plans and desired image for the Post.

The actions are to be taken in order of their impact and effectiveness on how the various users of the Post perceive their surroundings. Some actions are much more easily achieved and at lower cost than others, thus should be done first even if the total impact is not as great as that of others. All actions listed should be taken. It is difficult to create a unified image as all elements must be compatible, but that image is easily degraded if just one element does not fit in.

The final consideration in assigning priorities is to concentrate on those areas that form first impressions and those areas that are the most frequently used. An individual's image of a place is formed from what they encounter first and what they encounter regularly in their daily life.

The following lists are for specific actions for the three basic types of, maintenance, rehabilitation, and standards. Some are short term, one time efforts, and will have immediate impacts while others will take more time to establish and will be on going programs. All three types of activities should be started initially and run concurrently.

#### MAINTENANCE PROGRAM

- Establish dumpster location standards
- Review mowing and turf management techniques
- Establish an effective erosion control/revegetation program
- Review overall landscape maintenance techniques
- Review overall tree maintenance techniques
- Establish a limited irrigation program for high visibility and prominent turf/shrub areas
- Review overall building exterior maintenance techniques

#### REHABILITATION PROGRAM

- Remove and ban all handmade or substandard signs
- Establish high quality turf along principal entry drives and at primary destinations
- Establish improved landscaping along principal entry drives and at primary destinations
- Establish a walk paving program and remove existing pedestrian control fences in favor of standard fence and landscape applications
- Begin renovation or demolition of 'temporary' and unattractive buildings along principal entry drives and major roadways
- Establish a program to screen or relocate unsightly dumpsters, gas tanks, mechanical equipment, storage and paint sheds, recycle bins, and building service areas
- Establish a program to improve appearance of and landscape the bus shelters
- Renovate and redesign housing area community spaces, public recreation areas, and community playgrounds
- Establish a program to remove nonstandard and extraneous architectural elements from buildings
- Relocate or screen housing area utility hookups and connection boxes

- Remove nonstandard, unplanned parking areas, particularly in wooded areas, and reclaim as open spaces
- Establish a program to screen parking lots and utility structures
- Establish a program to pipe and cover open storm drainage channels
- Establish a program to place overhead utility wires located in high visibility areas, underground
- Establish an Installation Modernization Program for prominent or high visibility 'temporary' buildings
- Establish a program to create outdoor rest or park areas for Post employees, and to landscape and renovate the existing open spaces

#### DESIGN STANDARDS PROGRAM

- Create and adopt improved standard entry sign and location standards
- Adopt and implement uniform traffic, information, and identification sign systems
- Create erosion control standards
- Create landscape design and installation standards, develop a master planting plan, and implement
- Create street tree planting standards and master plan
- Create uniform site furnishings standards
- Create standards for the design and location of monuments and memorials
- Create uniform lighting standards for poles and light fixtures
- Create uniform storm drainage system standards
- Create uniform land use planning standards for existing as well as possible future expansion areas of the Post
- Create Small Area Plans for zones of similar activity on Post
- Create uniform standards for Small Area Plans for architectural design and building layout
- Create uniform color and exterior materials standards for each Small Area Plan and the Post as a whole
- Create uniform standards for the screening of utility structures, unsightly buildings and unsightly service devices and areas
- Create uniform utility systems design and location standards

### 3.

## **Visual Themes**

### Introduction

The theme "Halls for Learning, Landscapes for Living" has been selected for Fort Gordon. The intention is to promote the image of the Post as an outstanding educational environment. Fort Gordon is the largest communication school in the free world and has similarities with many large university communities. The educational environment must be complimented by the living conditions for the students, staff and faculty to maximize the learning environment. The two cannot be separated.

The existing image of Fort Gordon is weak and confusing with the separate areas of the Post, each having their own character. There is little or no continuity from area to area, leaving the user with an impression of a particular place but no sense of the Post as a whole. It is a collection of spaces, not the unified community it should be. To achieve this community environment, a series of unifying elements must be established and the major image makers for the Post must be strengthened and promoted. The needed unifying elements are cosmetic in nature such as a coordinated sign system, or a uniform color scheme, while the key image makers are single dominant elements such as a building like Signal Tower, or the open space of Barton Field.

The physical arrangement of Fort Gordon is well suited for establishing the unified community of a learning environment that the theme "Halls for Learning, Landscapes for Living" projects. The particular land use areas must be developed as parts of a larger community. Within each of these geographical areas the six Land Use Zones exist in varying degrees of importance. Each of these must project a definite image that supports the Post-wide theme.

#### LAND USE ZONES

The following is a discussion of the intended images of the six Land Use Zones as they are mapped on page 39.

#### 1. ADMINISTRATION

The administrative headquarters is the single most important location for establishing an image or identity for the Post. It is a principal destination at Fort Gordon and is located in the most prominent building on Post. only should all Post-wide administrative functions be located in close proximity to one another, they should occupy a central, highly visible location and be of one distinct architectural style. Parking should be addressed as a part of the overall design and not as a situation to be dealt Parking should be with as the need arises. An administrative core does not now exist at Fort Gordon and many of the finance and data processing centers are at other Parking is a problem for both areas and the Signal Tower building is often confused with the school function. In a similar fashion, but on a greatly reduced scale, the individual unit administration buildings should occupy a central dominant location and be of a compatible architectural style with that of the surrounding buildings. Often, these unit headquarters require relatively small buildings or are in portions of larger structures. In these cases, the entry image of the building should be projected by an increased use of site development elements and landscaping.

#### 2. COMMUNITY FACILITIES

These important high use areas should also be central in location and offer the best possible access at an appropriate scale for the particular facility. Typically, they are groupings of services and entertainment facilities, are the primary location of social interaction. They exist on a neighborhood and a Post-wide scale but essentially are for people and should not be The theme should be one of dominated by the automobile or service vehicles. a downtown commercial district with ample open public space and a variety of activities available. They should be the principal nodes of a public transportation system, and should have easy pedestrian access for any large concentrations of daytime workers. There are three significant concentrations of such areas on Post, the PX/Commissary area, the recreation/entertainment area at the west end of Barton Field, and an emerging community area in and around the new day care center in the housing area. There are other scattered facilities on Post.

#### 3. HOUSING

Residential areas should offer the image of being quiet, private, and secluded. On the whole, they need not be in close proximity to each other, but as blocks, can stand alone. The main theme of any residential area should come from the site development details and not be the buildings, however, compatible architecture is desired. That theme should be parklike, open and green. The mixing of housing types should be avoided. The dominant features of individual neighborhoods should be the community green spaces, landscaping, playgrounds, and schools. No housing areas should be built among major roadways or adjacent to industrial areas, and a thorough tree and landscape plan should be as evident as roads and sidewalks. The housing area at Fort Gordon is very well laid out with ample room for future development and an emerging community center/recreation area is well located at its core.

#### 4. INDUSTRIAL

The visual theme of these mixed utility, production and storage areas should be downplayed and reduced in impact. They should have the character of an industrial park. The point of exposure to the community at large should be little more than an entrance and an architecturally attractive, or landscaped A consolidation of industrial uses away from the central areas of the Post is needed, with one or several secure points of entry being established. The benefits are practical as well as visual, being the increased 'pockets of security provided for such an open base as Fort Gordon. These industrial parks could be a more secure location for critical utility and communications structures that are now vulnerable to disruption. points of entry should be landscaped, and extend to at least the administrative/receiving areas of the park. Additional green pockets should be located near concentrations of employees, in now unused spaces. majority of these areas will retain, however, their utilitarian image. There is an abundance of these areas on Post and the total amount of industrial space should be reduced.

#### 5. OPEN SPACE

The single most important aspect that open space must convey is that it is a planned system and not created by default. It is to be organized and serve to tie together the destinations that exist on Post. This variety of space calls for different images, one for a parade field and another for a forest buffer, but the overriding theme should be that each area is a planned and well maintained space. On a smaller scale, forecourts and plazas should be thought of as an integral part of the building they serve and should appear to have been planned as part of that destination. The opportunities for a strong formal open space system at Fort Gordon are excellent. The forms and axes of Barton Field, the 29th Street Mall, and the open field in front of the Signal School provide the basis of the system.

#### 6. MISSION SUPPORT

Because of the great diversity of the elements of mission support it is difficult to form a visual theme. The few features common to all should be standardized and like the open space system the location of these facilities should appear to be planned. Training areas of high visual interest should be located to take advantage of that interest and receive a high degree of maintenance; most, however, will occur in less visible areas. Most of the mission support facilities on Post are barracks or classroom buildings, and should receive a high level of grounds maintenance.

### 4.

# Visual Goals and Objectives

#### Goals

To create a visual appearance at Fort Gordon that projects the stated themes, a series of goals must be achieved. A logical progression in accomplishing these goals will reduce the time required to reach this new desired image. Therefore, they will be presented in an order that will maximize the impact of each on the greatest number of viewers. The first goal will be short term and cosmetic in nature, but will have a highly visible impact, while those listed last will be the more costly and time consuming to achieve. Understand that no single goal is most important, because the failure of any one can seriously disrupt the entire theme by becoming the focus of attention. Each goal will have specific objectives taken from the visual improvement priorities. Some objectives will be quickly achieved and others will address planning and layout situations years in the making. All goals will require ongoing commitments to maintain the new themes of Fort Gordon, once they have been achieved.

# THE GOALS ARE . . . PROJECT A STRONG SENSE OF ENTRY, THROUGH ...

The use of standard entry signs and a uniform sign system at Gates 1, 2, 3, and 5, and at Bush Field Air Terminal.

The use of an increased level of landscaping and improved landscape and turf maintenance practices along all entry drives and major roadways.

The screening or removal of unsightly elements along principal entry drives.

The use of a uniform architecture at each gate house that is compatible with the recommended Post-wide architecture.

A program to standardize site elements and relocate visible utility system elements along principal entry drives.

The establishment of green parkway entry drives from Gates 1, 2, and 5 into the Post proper that sets back new buildings.

The construction of a main visitor welcome center and or museum complex, possibly to be adjacent to the proposed National Science Center.

#### ESTABLISH A STRONG GRAPHIC IMAGE, THROUGH . . .

The Post-wide use of uniform traffic control, information and identification signs mounted on a well designed, uniform, easily assembled and versatile mounting system.

The removal of existing temporary, home made, non-standard signs.

- The provision of uniform and appropriate spaces for the display of unit insignia and morale slogans.
  - The control of existing and future Post logo or architectural signs.

A uniform street and pavement striping program.

- The redesign and construction of intersections and locations on Post that are confusing or congested and a general reorganization of the traffic circulation system.

#### IMPROVE THE QUALITY OF THE LANDSCAPING, THROUGH ...

A review and improvement of current maintenance practices.

A rescheduling of maintenance efforts to increase the level of care given to high visibility and heavily used sites.

An improved turf establishment and maintenance program.

A program that makes standard plant materials available to housing areas residents.

The general relandscaping of all high visibility roadways, open spaces and buildings.

An active use of plant material to screen unsightly views and buildings and to define and organize visual open space.

The establishment of an effective erosion control system using landscape materials as well as hard engineering applications.

#### REDUCE THE GENERAL CLUTTER THROUGH ...

The establishment of a uniform architecture, color scheme; and exterior materials policy.

The removal of dilapidated buildings, fences, equipment and other abandoned or unsightly elements.

An overall reduction of signs and sign posts through actual removal or consolidation of messages onto multi-purpose standards.

The screening and landscaping of parking areas.

The relocating or screening of all dumpsters and building service areas on Post.

The removal of pedestrian control devices, and non-standard fences.

A program to bury highly visible overhead wires and utilities.

The replacement of Post-wide site furnishings and standardization of individual unit outdoor lounge areas.

The removal or consolidation of the various storage and utility buildings on Post, including the many recycling bins now present. The elimination of open drainage.

The removal of inappropriate items from building facades, such as utilities, graphics, awnings, signs, lights and other extraneous items.

#### **ESTABLISH A MASTER TREE**

#### CANOPY/WIND BREAK PROGRAM, THROUGH...

The renovation and rehabilitation of diseased or stressed trees in the main cantonment area, particularly for trees in prominent locations or of high scenic value.

The removal of those trees beyond salvage.

A ban on parking under established trees or groves of trees in unimproved (unpaved) or undesignated areas.

The subsoiling and aeration of compacted soils under existing trees and the establishment of turf or ground cover in these areas.

An active tree fertilizing and spraying program.

The planned introduction of standard, native trees in areas of high visibility, sparse tree cover, and wind break protection.

The stipulation that a percentage of new building budgets be earmarked from tree plantings.

#### **ESTABLISH A SYSTEM**

#### OF CIRCULATION AND OPEN SPACES, THROUGH...

- The redesign and landscaping of the three major existing spaces on Post, Barton Field, the connecting mall to Signal Towers, and the school parade ground along 7th Avenue.
- The creation and improvement of important focal points within the open space system, such as a monument plaza or reviewing stand.
- The creation of a central monument plaza in a high visibility location.
- The use of setbacks in relation to building heights for streets, parking or adjacent buildings.
- The redesign and improvement of recreation facility spaces particularly in playground areas •
- The creation of entry drive parkways at Gates 1, 2, and 5 that visually deliver the viewer to the main Post.
- The creation of Post-wide pedestrian and bike systems located away from the street and road system wherever possible.
- The use of standard outdoor lighting to define open spaces.
- A program to develop small, passive and active parks in the community facilities areas and for concentrations of daytime workers.

#### ESTABLISH SMALL AREA IDENTITIES, THROUGH ...

The identification of functional 'small areas' as part of a master development plan.

The removal or screening of nonconforming buildings in each designated 'small area'.

The use of an uniform architecture in areas of like function.

The use of the standard graphic color system for unit branches.

A consolidation of facilities by land use zone such as industrial areas

The creation of points of focus such as a green space, courtyard, display or other landmark.

# ESTABLISH A **POST WIDE**ORGANIZATION OF SPACE, THROUGH . . .

The consolidation of Post administration functions in a central dominant locat ion.

The creation of a hierarchy of roads and paths.

The creation of a Post-wide, comprehensive parking system.

The designation of a permanent open space system designed to feature major buildings and landmarks.

Planning for expected future build-ups that often leave nonconforming structures in central and high visibility areas.

The definition of visual areas through the use of landscaping and screening to accentuate nodes and desirable vistas.

Highlighting 'Small Area' entries through improved signage and landscaping.

Standardizing the level of treatment for entries to like facilities, through landscaping and signage.

# INSTALLATION DESIGN GUIDELINES Fort Gordon, Georgia

# **DESIGN GUIDE**

#### Prepared by:

Laubmann-Reed & Associates, inc. 505 Tenth St.., N.W. Suite 200 Atlanta,-Georgia 30318 (404) 872-2459

#### Architectural Consultants:

Diedrich Architects & Associates, Inc., Atlanta A/E Contract # D'ACA 21-85-C-0574

#### INSTALLATION DESIGN GUIDE

FOR

U.S. ARMY SIGNAL CENTER

AND

FORT GORDON, GEORGIA

Prepared By
Laubmann-Reed & Associates, Inc.
Atlanta, Georgia
under the direction of

U.S. Army Engineer District, Savannah Corps of Engineers Savannah, Georgia

APPROVED BY:		
M.G. Bruce R. Harris Commanding General Fort Gordon, Georgia	Date	
Roger Yankoupe Colonel, GS Deputy Chief of Staff, Engineer Headquarters, U.S. Army Training & Doctrine Command,	Date	

Fort Monroe, Virginia

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## How to Use This Design Guide

This document is to be used by any person who is responsible for preparing; requests for proposals, design.contracts, construction contracts, or maintenance work orders for any element or facility of this Post. The information deals with the visual quality of each design element.

The first task is to determine the nature of the action to he performed and the location on Post where it is to occur. Next, the Land Use Zone map on page 10, is to be consuited to determine which of the six Land Use Zones the action will occur in. It my occur in one, several or all Zones.

For most actions involving the design of facilities on Post, including all of those to be designed by outside design groups, whether government or private, the entire Part I, Overview, is to be included. This will provide a general introduction to the Post and its overall intended image and goals.

Once the Land Use Zone or Zones have been determined, the introductory page II, and four pages of specific zone information for each of the six Land Use Zones the project will occur in, are to be included. The inclusion of information in Parts I and II may not be necessary in minor design or materials selection efforts, or in projects to be designed by the in-house staff. A case by case determination is to be made for every project.

The final task involves the actual selection of specific <u>Design Element Information</u>, from each of the seven <u>Design Elements Matrix</u> pages located at the beginning of Part III, Design Guidelines.

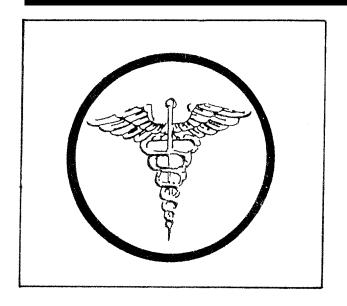
- 1. Remove and copy the appropriate matrix pages, returning the originals to this notebook.
- 2. On the copies, circle the applicable design elements.
- 3. Circle the option or options required.

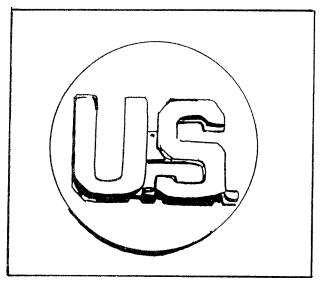
- 4. Check the appropriate discipline routing block(s).
- 5. Retrieve the needed pages from this notebook, copy and return the originals to their proper place.
- 6. Review the copied pages to make sure that the information is actually needed for the project and at the same time checking the routing block(s) on each page.
- 7. Add the information form Parts I and II and include as part of the overall contract document.

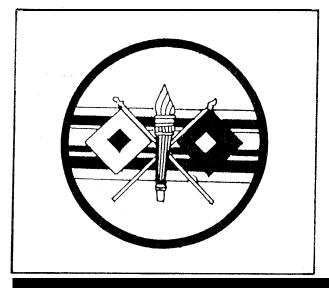
The information in this guidelines -is primarily for improving the visual. character of the Post. The format that it is presented in allows for easy revision or placement of design information. Also, information or standards that are not visual in nature can easily be included in this format. All changes and design information to be added is to be carefully considered and must complement existing visual design standards,

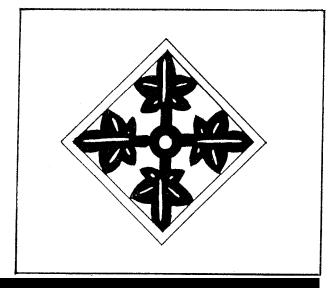
# PART I

# **OVERVIEW**









## General Instructions

This set of Design Guidelines provides basic standards for the appearance of elements to be built or installed on Post. These standards are to be applied on all work, whether it be renovation or maintenance of existing conditions or the creation of new facilities.

These Design Guidelines are presented in three parts; a basic overview of Pos t-wide concerns; specific objectives for each of the six Land Use Zones which make up the Post; and detailed design information and standards for seven broad design categories. When preparing a Request For Proposal or a Contract for design, construction or maintenance services certain pages of these three parts of information are to be included.

- Part I, Overview, is always to be included in such R.F.P'S or contracts.
- 2. The introduction and the appropriate Land Use Zone(s) information of Part II, is also to be included. A map of the established Land Use Zones shows which zone or Zones the project in question lies in. If the status of a project is uncertain a determination can be made from the descriptions of each Zone in Part II.
- 3. The final pages of information to be included are to be determined by using the Design Elements Matrix which is located at the beginning of Part III. The Matrix is divided into seven broad design categories, one page for each of the seven, Each page lists a number of specific design elements such as an entry sign. Then, indicated by number, the available design options are shown for each of the six 'Land Use Zones.

In some cases, more than one application is permit ted in a given Zone depending on the intended use. These are clearly marked as to which applies,

During the contract preparation, each specific design element for the appropriate category is considered for inclusion. If a particular application is indicated for the project's Land Use Zone or Zones, that piece of information is to-be. made a part of the contract or R.F.P.

In a similar manner, specific information is Co be used by in-house design, construction or maintenance personnel as they perform their day to day tasks.

An additional space is provided on the Matrix for the preparer to determine which of six design disciplines a particular piece of information is to go to. A similar box is available on the design information pages which will tell the A/E who in their organization, is to receive the information.

In most projects, all seven design categories will have guidance to offer, therefore each should be reviewed in every contract preparation effort.

### Introduction to Fort Gordon

Fort Gordon, home of the United States Army Signal Center (USASC), is a U.S. Training and Doctrine Command (TRADOC) installation. Fort Gordon's mission also includes command and support for Forces Command FORSCOM activities, units and sub-installations. Additionally, training of Reserve Component forces is conducted here.

The Signal School trains soldier-communicators in the installation, operation, and maintenance of modern military communications-electronics equipment, an area that continues to rapidly increase in importance in military capabilities. Signal Corps career and specialist signal training for both officers and enlisted personnel from all components of the Army is provided by the Signal Center and Fort Gordon. This Post is the largest communications and electronics training facility in the free world.

Information is presented on three levels, all of which are to be considered prior to the design or construction of any items on Post.

- 1. Information on Post-wide concerns is presented which gives the existing and intended images for Fort Gordon as well as a listing of general goals.
- 2. More specific information on the Land Use Zone or Zones that this project will impact is presented. This includes facilities descriptions, objectives, and historic implications for the appropriate Zone(s).
- 3. Specific design information for elements of this project is presented as standards that will be used in all design considerations.

The people who live and work at Fort Gordon require and deserve an environment of high visual quality and it is the intent of these guidelines to establish and maintain such an environment. The theme of "Halls for Learning, Landscapes for Living" has been selected for the Post. The intention is to promote the Post as being an outstanding educational environment. To compliment this learning center, the living and recreational facilities for the students, faculty, staff and their families must be equally outstanding. The two are as one, they cannot be separated.

# **Existing Image of Fort Gordon**

The existing image of Fort Gordon is determined by the broad flat ridge upon which the cantonment lies, the open, sparse tree cover, and a strict, rectilinear street pattern that is reinforced by a repetitive placement of the many structures of the Post. The architecture is generally not exciting or even interesting, and although the grounds present a clean efficient look, they are of a low design quality with many makeshift, home made features.

The visual image is drab and unimaginative. The feel of the place is that of an arid and hot climate not typical of the region. There is little to remind the viewer that this is a major educational setting or a viable highly specialized community.

The notable image makers or landmarks of the Post include; the Signal Towers, Classrooms, and Eisenhower Medical Center Buildings; the major open spaces of Barton Field and the School green along 7th Avenue; and the well defined spatial arrangement of the major land uses. These elements are to be enhanced.

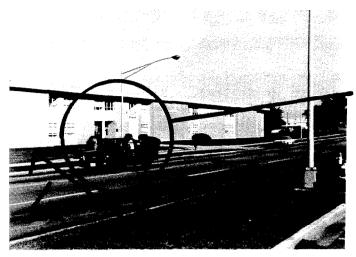
MANY HIGH VISIBILITY POWER POLES

LINEAR ROADS WITH NO TREE
CANOPY THE ROAD IS NOT ENCLOSED
IT BLEEDS' OFF TO EXCH SIDE



A MAJOR IMAGE
MAKER - HAS
NO ENTRY SEQUENCE ITS SEN
IN AMIDST OF
UNATTRACTIVE
SEMIPERMANENT
BUILDINGS.

EROSION IS A
MAJOR PROBLEM

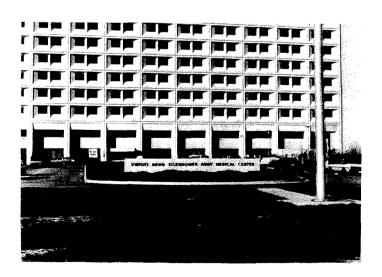


ARCHITECTURALUT UNIMAGINATIVE BUILDINGS
NO ENTRY TREATMENT
THE ROAD AND BUILDING
RELATIONSHIP MAKES
THIS AREA LOOK LIKE
A 'STRIP' DEVELOP-

MEHT



HERE THE ARCHITECTURE
HAS AN INTERESTING
FORM - BUT THE DESIGN
APPEARS TO BELONG
IN AN ARID REGION.
THE EROSION IN THE
LANN INTENSIFIES THE
ARID QUALITT.



NICE MONUMENTAL

ARCHITECTURE, IT IS

UNFORTUNATE THAT IT

DOES NOT VISUALLY

CONTRIBUTE TO THE

VISUAL IMAGE OF THE

POST

LANDSCAPING IS NOT

VERY STIMULATING.

## Intended Image of Fort Gordon

Very little of the 'Old' Post is of an appropriate design quality to be included as a standard in these design guidelines. The intended image features a standard architectural style, an increase in the Landscaping and Tree Cover, and a strengthening of the major open spaces, entry sequences and high visibility areas of the Post. The well defined land uses and circulation systems provide a strong framework for development that is to be reinforced with; an improved series of standard design elements, unifying systems of signage, landscaping, site furnishings and lighting; and an increased emphasis on the major open spaces which now exist.

The few existing buildings which come close to the intended style and forms for the Post include the recently constructed package beverage store, the auto crafts center, and the new child day care center. Certain 'stock' or standard plans, usually provided by the Department of the Army, or the Corp of Engineers can easily be adapted to this intended image. An excellent example of such a building is the Bicentennial Chapel located on 5th Avenue. This plan could easily be brought into compliance with a careful selection of permitted materials. Other 'stock' plans may require additional changes.

The design or adaption of plans for new structures on Post are to reflect a high quality, professional image of a well run, efficient organization. There will be a continuity of design which will require a uniform set of standards but at the same time enough variety to distinguish between Land Use Zones and prevent a boring or repetitive look. These guidelines are intended to set those standards.

New buildings or renovations on Post will be of an architectural character reflective of the regional, piedmont style, but are to interpret that style in a contemporary and fresh manner. Many of the recent buildings are a mix of contemporary styles, several are quite attractive, but they rarely reflect the regional style. As existing structures are renovated, they are to be brought into character with new buildings so that, in time there will be a common look or feel of the place known as Fort Gordon.

Buildings that are inconsistent with this look will not be permitted. New designs must strictly avoid being different just for the sake of being different. Currently fashionable architectural styles, such as the "Post Modern" are to be avoided in favor of a more conservative and fundamental contemporary look; dignified, never relying on tricks for visual interest.

To strengthen this uniform image, common materials and colors have been made standard and are to be used throughout the Installation and at any remote locations attached to Fort Gordon. The single most common material will be the use of a limited range of brick types and colors. The standard brick types are common to the region, have historical precedents, are energy efficient, and have low maintenance requirements but they also will carry the image of stability, strength and endurance. These same brick types are to be used in site elements such as walls and paving to help unify the Post.

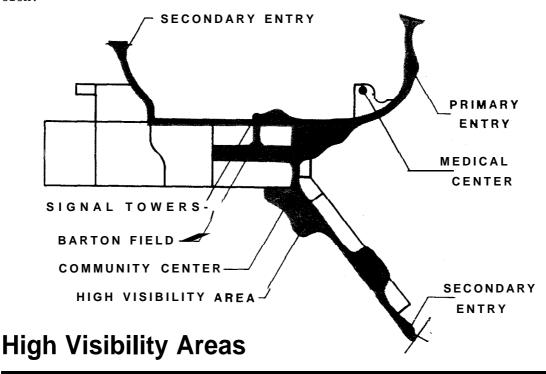
The second most common material is to be the liberal use of a standing seam metal roof as an entire roofing system or on larger flat, built up roofed structures as accent features to define entry areas, stair wells or attached structures.

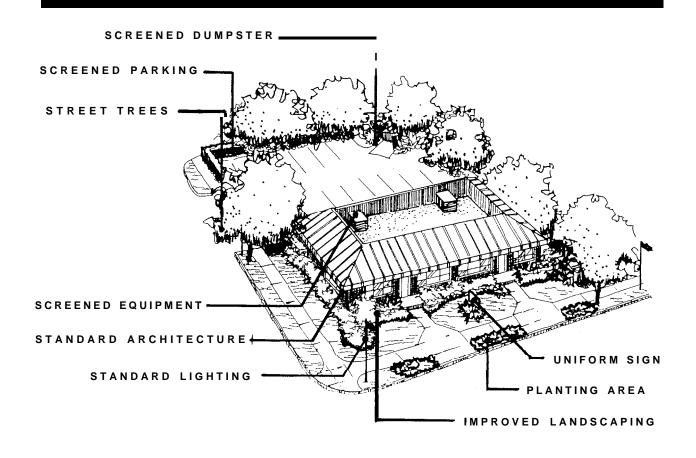
Glazing is to generally be recessed under broad eaves supported by columns or pilasters to create covered walks, and to effect solar shading.

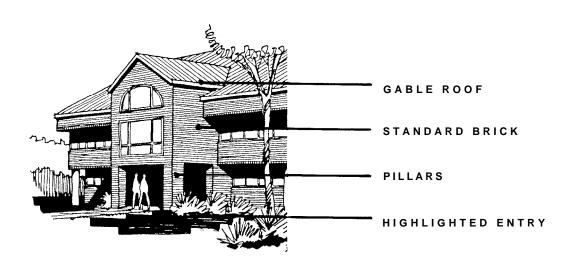
Some finished concrete or stucco like panels or banding will be permitted, again to delineate important building features and as accent elements. The use of a very limited set of accent colors or tiles is also to be allowed to add visual interest.

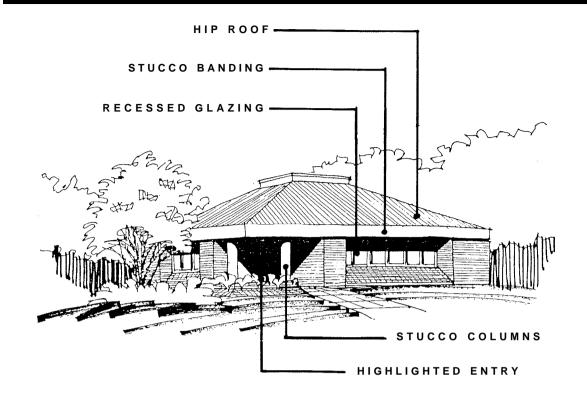
The application of these standard materials is intended to guide the design toward a uniform architecture, not to restrict their innovative or creative use, to provide an environment of high visual quality at Fort Gordon.

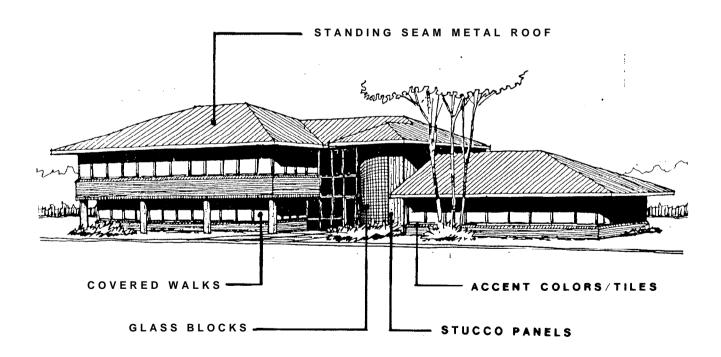
The highest visibility areas of Post are to be given the strongest consider ation.











### Goals for Fort Gordon

To achieve the intended image that has been projected at Fort Gordon, a series of goals has been identified. Each of these goals is to be considered in the planning and design of this project. How the project will impact the image of the Post as a whole and the particular Land Use Zone(s) and Small Area(s) where it is to be located will be addressed in the conceptual stages of design and reviewed as the project progresses.

These goals are presented in order of their projected impact on the visual environment, but each is vital to achieving the intended image for Fort Gordon.

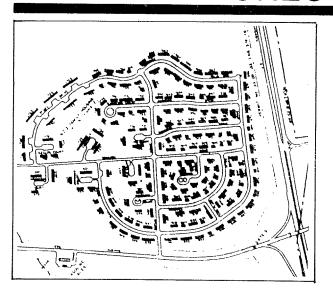
### The Goals

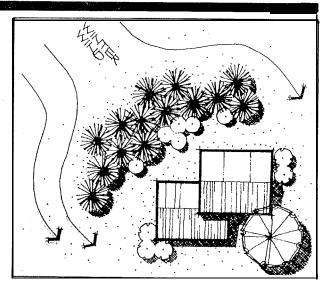
- To project a strong sense of entry into the Post by being particulary sensitive to any projects that directly or indirectly impact the entry drives from Gates 1, 2, and 5 into the Post proper. All projects are to consider any such visual impact and take measures to screen, relocate or eliminate any unsightly or utilitarian features that may occur along these routes. Also, in the planning and design of each such project, the design is to be compatible with or significantly up-grade the visual appearance of existing conditions. These considerations are also to be made at entries to any remote facilities of Fort Gordon.
- 2. To establish a strong graphic image through the strict use of the standard sign systems listed in the Design Guidelines. Non-conforming and unnecessary signs will be cause for the rejection of a design proposal.
- 3. To improve the quality of the landscaping through the increased use of standard plant materials, and minimum maintenance designs. Planting designs are to consider likely maintenance requirements, screening capabilities, and the level of visability the materials will receive. The use of irrigation to establish turf in high visibility areas is to be considered.
- **4.** To reduce the general clutter on the grounds by screening, removing and prohibiting design features and elements in the landscape that are unsightly, unneeded, or of a utilitarian design. The use of non-standard design elements and items of a low design quality will not be permitted. All projects are to provide for the removal or replacement of all non-standard design elements within the 'Limit of Work' designation of the site plan.

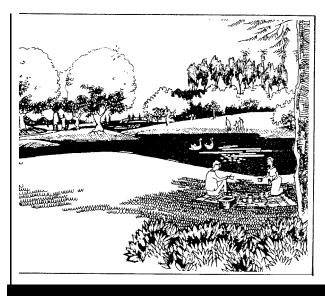
- 5. To establish a master tree canopy and wind break program that is to generally improve the tree cover in the cantonment area of the Post. All projects are to provide for the planting of approved trees as a major part of the landscape requirements of that project. Existing trees are to be protected through imaginative and sound siting and design and by following the established procedures for protection during construction. All trees within the 'Limit of Work' designation are to be considered for such protection and for horticultural renovation as part of that project.
- To establish a system of open spaces that will compliment and connect the existing open spaces now on Post. The central features of this system are to be the main parade ground of Barton Field, the School Green along 7th Avenue, the small connecting field between 6th and 7th Avenues at 29th Street, and the parkway entry drives from Gates 1, 2, and 5 into the Post proper. A major monument/memorial plaza is to be the site for most such memorials on Post. Existing and proposed recreational grounds both for active and passive use are to be visually and physically joined to this system.
- 7. To establish 'Small Area' identities for selected places with each being a part of the larger Post but having distinctive boundaries and character. These areas are; the D. D. Eisenhower Army Medical Center Complex, the Communications School/Signal Towers Complex north of 7th Avenue, the North Barton Field Barracks, the South Barton Field Barracks, the Reception Station/Administrative Complex east of Barton Field, the recreation/service club complex west of Barton Field, the Post Exchange/Commissary Community Facilities Complex, each of the four housing areas, the Officers Club/BOQ Complex, the Industrial Park Area near Gate 3, and the Reserve Center Complex.
- 8. To establish a Post-wide organization of space by consolidating compatible Land Uses, and establishing a hierarchy of roads and paths. Each project is to consider the immediate and the long term effect it will have on the visual quality of the 'Small Area' and of the Post as a whole. Will it fit the character of the area and does it belong at that location. Projects that are not compatible or which disrupt a viable system such as open space or roadways, will not be permitted.

# PART II

# LAND USE ZONES









### General Instructions

Every project at Fort Gordon will fall into at least one of the six Land Use Zones of;

- Administration
- Community Facilities
- Housing
- Industrial
- Open Space
- Mission Support

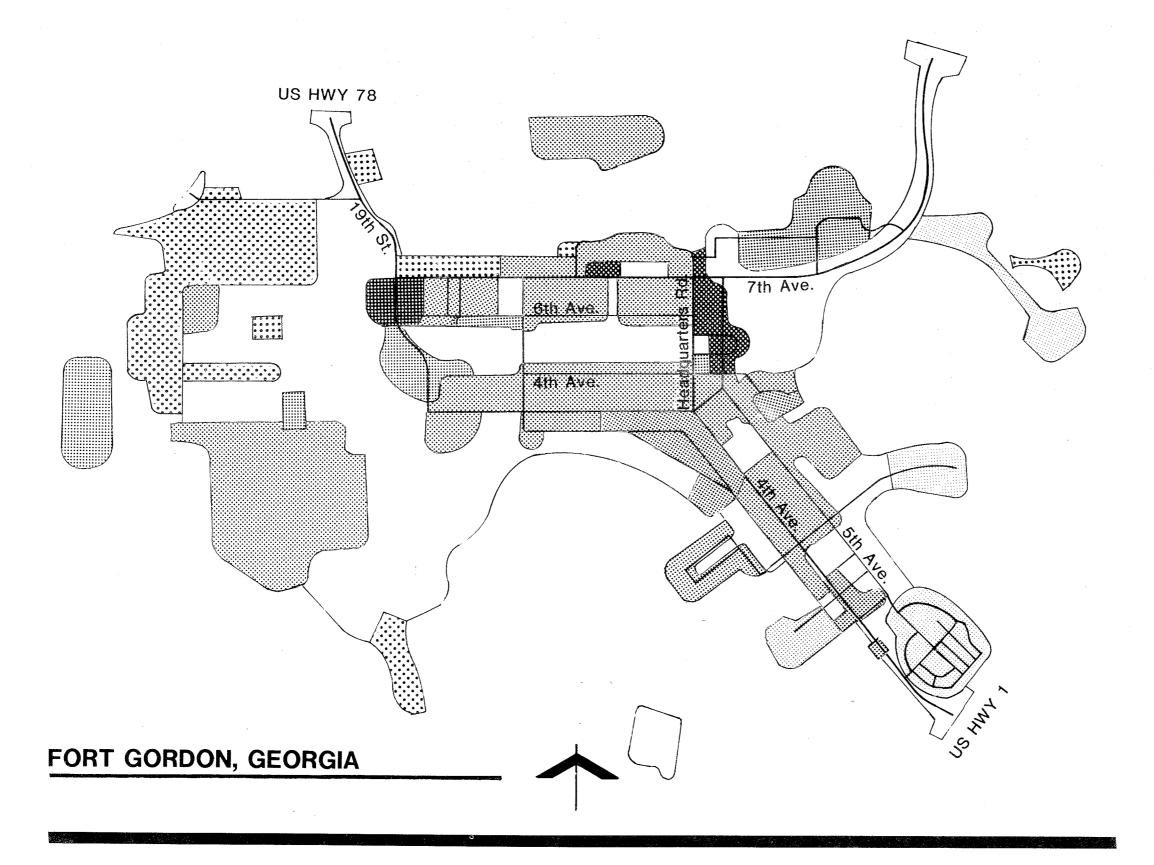
Many projects will fall into more than one of the six Zones. The introductory statement and the appropriate Land Use Zone(s) information section(s) are to be included in the contract or request for proposals now being prepared.

A determination of which Zone or Zones this project will impact is to be made from the Land Use Zones Map which is a part of this Document. If a determination cannot be easily made, the descriptions for each Zone are to be reviewed for clarification.

In cases where a project crosses into another Zone, such as in a roadway project, the standards and criteria for the Zone of the <u>Higher Design Level</u> take precedence and are to be used to a point of logical transition, —Design Levels, from the highest to the lowest are as follows;

- Administration
- Community Facilities
- Mission Support
- Housing
- Open Space
- Industrial

In cases where a structure of one Land Use iies in another Zone, the structure will take on the appearance and design standards of that Zone. Examples of this might include an administrative building in a Mission Support Zone or a utility or industrial facility in a Housing Zone. Non-conforming uses, if they cannot be made to Look compatible with their surroundings are to be screened from view, located in a low visability area or removed,



## LAND USE ZONES

## **LEGEND**

ADMINISTRATION

COMMUNITY FACILITIES

MISSION SUPPORT

HOUSING

OPEN SPACE

INDUSTRIAL

### Land Use Zones

Fort Gordon has been divided into six Land Use Zones. All land on Post can be classified into one of these Zones, which are not to be confused with the five broad Land Use Areas discussed in the Analytical Environmental Assessment Report or in other Master Planning Documents.

The six Land Use Zones, which are shown on the Land Use Zones Map, available at the offices of the Directorate of Enginering and Housing, are listed in order of their level of design from highest to lowest and include;

- Administration Areas
- Community Facilities
- Mission Support Areas
- Housing Neighborhoods
- Open Spaces and
- Industrial Parks

This	project	has	been	determined	to	be	in	the	
									_
									_

Zone(s).

Information pertaining to the Zone(s) in question has been included for review as part of this document. The information includes a description of the types of facilities found in the Zone(s), the intended image and objectives for the Zone(s) and, any historical implications that are to be considered.

If this project is sited in more than one Zone, the standards and criteria for the Zone of the higher level of design will take precedence and be used up to a logical point of transition. The lower level of design will then begin to be used. Thus, any street, intersection or multi-use building will be given the higher level of design treatment.

In cases where a structure of one Land Use lies in another Zone, the structure will take on the appearance and design standards of that Zone. Examples of this might include an administrative building in a Mission Support Zone or a utility or industrial facility in a Housing Zone. Non-conforming uses, if they cannot be made to look compatible with their surroundings are to be screened from view, located in a low visibility area or removed.

#### Administrative Land Use Zone

The administrative headquarters is the single most important location for establishing an image or identity for the Post. It is a principal destination and at Fort Gordon is located in the most prominent building on Post, Signal Towers. Many of the administrative support facilities occur in the area east of Barton Field in older wood frame structures. This area is in a period of transition and offers an excellent opportunity to establish a high visibility central core for the Post. Parking is a problem for both areas and the Signal Towers Building is sometimes confused with the school buildings which are architecturally similar and surround it's base. These two administrative centers are the most visible areas on Post and should be treated as such.

In a similar fashion, but on a greatly reduced scale, the individual unit administration buildings are to occupy a central dominant location and be of a compatible architectural style with that of the surrounding buildings. Often, these unit headquarters require relatively small buildings or are in portions of larger structures. In these cases, the entry image of the building is to be projected out by an increased use of site development elements and landscaping.

Administrative buildings must be;

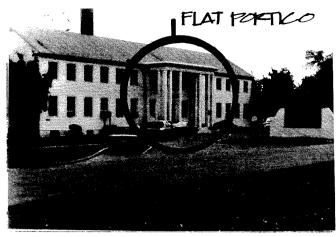
- 1. Easily located
- 2. Impressive architecturally
- 3. Monumental in scale
- 4. Rich in their materials]
- 5. Professional and business like in their appearance

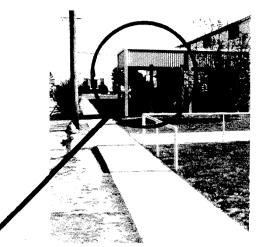
Minor administrative buildings are to be similar but less monumental. Architectural character will be a contemporary interpretation of the regional architecture. Brick walls and sloped metal roofs will be key design elements.

#### TYPES OF ADMINISTRATIVE AREAS

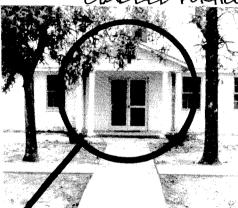
There are several types of administrative areas on Post, each serving a different level of command or service. They include:

Post-wide Adminstration
General Command
Directorate Commands
Unit Specific Administration Areas, Located in
Free standing buildings
A section of a larger building





GARLED PORTLO

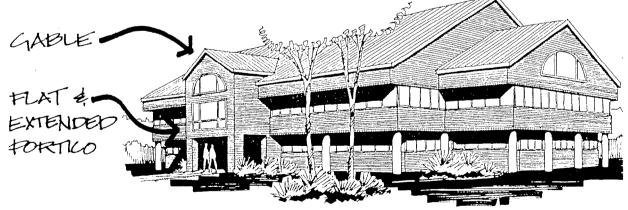


THIS ENTRY LOOKS LIKE AN APPENDAGE INSTEAD OF PART OF THE BUILDING. THE EROSION ON THE STREET SIDE ATTESTS THE FACT THE WALK IS TOO NARROW. AUTHOUGH THE PEDESTRIAN CONTROL DEVICE HAS SAVED THE CRASS IT IS NOT A PARTICULARLY ATTRACTIVE SOLUTION.

THE FORMALITY OF THE ABOVE BUILDING HAS BEEN RECOGNIZED—THE TREES & SHRUBS THAT PLANK THE SIDEWALK. A MORE THOROUGH PLANTING & THE ESTABLISHMENT OF GRASS WOULD HELD IMMENSELT.

ALL THREE OF THE ABOVE ENTRY ELEMENTS ARE REPLECTED

IN THIS PROPOSED ARCHITECTURAL STYLE



## **Specific Objectives**

The primary objectives for the Administrative Land Use Zone are to;

- 1. Provide a strong point of first impression for visitors to Fort Gordon.
- 2. Provide visible landmarks and occupy central areas and key points of focus in the overall layout of the Post.
- 3. Expose most visitors to the architectural theme and the unifying elements of signage, landscaping and site furnishings.

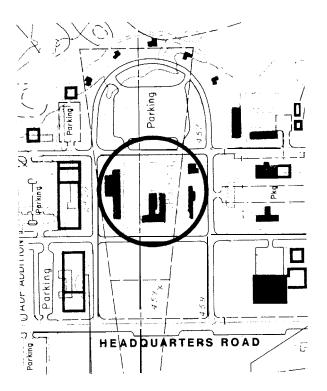
More specific objectives for improving the quality of the visual environment at Fort Gordon are;

- 1. A relandscaping of the grounds of the two major administrative areas with an emphasis on street tree planting.
- 2. The visual linking of the Signal Towers complex to the open space across 7th Avenue to the south.
- 3. The screening or removal of utility structures located at the entrances to major administration buildings.
- A reorganization and increase of parking at the two major administrative areas.
- 5. That pedestrian access be improved to the two major administrative areas.
- 6. That monuments, water features, flag courts, parade grounds, and memorials are to be located as adjacent uses.
- 7. That the formal street patterns be preserved where they exist in these zones.
- 8. That the highest level of landscaping and the most formal materials and designed be used in these areas.
- 9. That all overhead wiring in these high visibility areas be placed underground.
- 10. That turf be established through the use of irrigation if necessary in these high visibility areas.
- 11. That all storm drain facilities be placed underground.

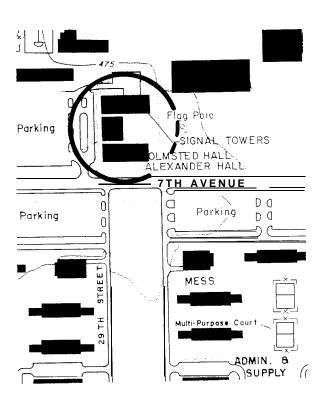
### **Historic Implications**

The original Post headquarters building and the surrounding area, located immediately to the east of the Barton Field Parade Ground may have historical significance. The area is laid out in a formal grid street pattern with a semi-circular street loop being the site or the original officers cottages, many of which still exist. This formal arrangement is to be preserved. The memorial area in front of the original headquarters building is to be preserved.

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).







**ADMINISTRATIVE COMMAND** 

### Community Facilities Land Use Zone

These important high use areas are also central in location and are to offer the best possible access at an appropriate scale for the particular facility. Typically, they are groupings of services and entertainment facilities, and are the primary location of social interaction. They exist on a neighborhood and a Post-wide scale but essentially are for people and are not to be dominated by the automobile or service vehicles. The feel is to be one of a downtown commercial district with ample open public space and a variety of activities available. They should be the principal nodes of a public transportation system, and are to have easy pedestrian access for any large concentrations of daytime workers. There are three significant concentrations of such areas on Post, the PX/Commissary area, the recreation/entertainment area at the west end of Barton Field, and an emerging community area in and around the new day care center in the housing area. The D.D. Eisenhower Army Medical Center complex is also to be considered as in the community facilities There are other scattered facilities on Post, including the Land Use Zone. Library, the Officers Club compound, the Quick Stop service station new Gate 5, and the bowling/theatre are adjacent to the Reserve Training Center as well as the various religious and recreational structures.

They will be very similar to the character described for Administrative buildings, except that recreational and retail facilities will be less formal and more inviting to the user. Medical facilities are to retain the formality and professional look found in administrative buildings.

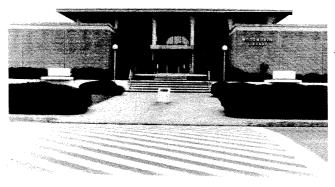
These public structures offer the greatest opportunity for innovative design of high visibility that is to set the image of Fort Gordon.

TYPES OF COMMUNITY FACILITIES AREAS

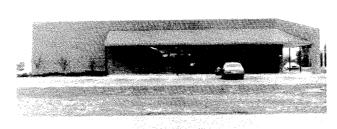
There are several types of these areas on Post, they include:

Post-wide

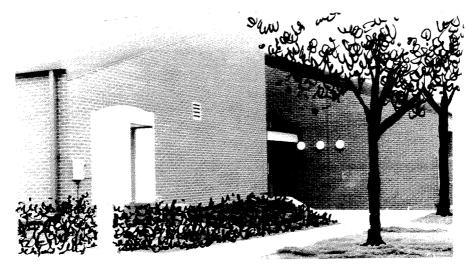
Commercial-retail facilities
Medical facilities
Recreation facilities
Continuing education facilities
Cultural improvement facilities
Community-wide lodging/accommodation facilities
Day care centers
Churches
Public safety facilities



ALTHOUGH THE LIBRART 15
ARCHITECTURALLY IMPRESSIVE,
THE 'MUSHROOM COLUMNS
AND 'COBBLE-LIKE'
BUILDING MATERIAL
ALIENATE IT FROM OTHER
ARCHITECTURE ON POST.



THE PACKAGE BEVERAGE
STORE BEGINS TO STANDARDIZE LERTAIN ARCHITECTURAL ELEMENTS. THE
BRICK, STANDING SEAM
ROOF, AND OVERHANG
OVER WINDOWS IF REFEATED
THESE ELEMENTS WILL
VISUALLY TIE THE POST
TOGETHER.



THIS ALTERED
PLOTURE ILLUSTRATES
THE IMPACT THAT
A SIMPLE PLANTING
CAN HAVE ON A
STRUCTURE.

### Specific Objectives

The primary objectives for the Community Facilities Land Use Zone are to;

- 1. Provide the points of principle social interaction by creating attractive community and medical facilities.
- 2. Provide centrally located, high visibility 'Downtown' centers with excellent vehicular and pedestrian access.
- 3. Create appropriate community centers for indoor recreation, cultural spiritual and educational activities.

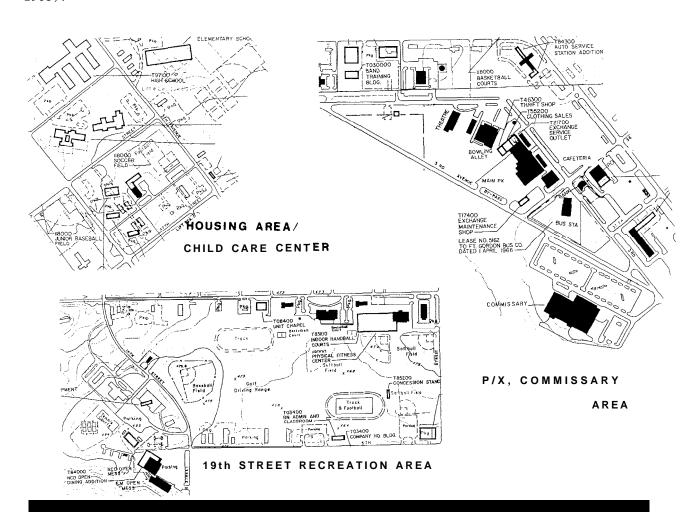
More specific objectives for improving the quality of the visual environment at Fort Gordon are;

- 1. Designs are to be on a human scale and provide for informal gatherings and special events.
- 2, That a major indoor community life/multi-purpose facility be sited on Post, possibly at the west end of Barton Field where adequate space for parking exists.
- 3. That a major renovation of the Post Exchange/Commissary area be undertaken.
- 4. That parking arrangements and amounts be reviewed and reorganized as needed at each community facility.
- 5. That all such facilities be adjacent to or connected by an open space system and that major facilities be accessible by safe pedestrian and bicycle systems.
- 6. That the parking and service areas should not dominate these areas and that they be adequately landscaped and screened.
- 7. That a 'small area plan' be developed for the series of recreation facilities west of Barton Field.
- 8. That a highlevel of landscaping and detail design is to be used in these areas, with an emphasis on street tree plantings.
- 9. That the use of sculptures, memorials, and water features be considered for these areas.

## **Historic Implications**

There are few of the original structures of the Post that have historical significance. Within the Community Facilities Land Use Zones, the recreation center on 19th Street, the nearby chapel, and several buildings in the 4th and 5th Avenue area near the Post Exchange Complex are architecturally interesting. As examples of the temporary construction which was typical of the massive buildup during W.W. II, some of these buildings may have historic value. The preservation and use of the existing road layout is encouraged.

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).



### Mission Support Land Use Zone

Because of the great diversity of the elements of mission support it is difficult to form a visual theme. The few features common to all are to be standardized and like the open space system the location of these facilities should appear to be planned. Training areas of high visual interest are to be located to take advantage of that interest and receive a higher degree of maintenance; most, however, will occur in less visible areas. mission support facilities on Post are barracks or classroom buildings, and are to receive a high level of grounds maintenance. The outstanding characteristic is one of utilitarian design with little regard for appearance or As places where soldiers not only work and train, but also live, aesthetics. some consideration must be given to relieve the constant stark surroundings for the individual. Troop housing in areas for personnel assigned to permanent or long term duty should provide some alternatives from the daily routine.

There are two principal barracks areas on Post, those immediately north and those south of Barton Field. Also, there are two high rise dormitory like buildings which house the B.E.Q. near the entry drive, and the B.O.Q. near the Officers Club. There are also the housing compounds at the Medical Center, and at the Brems Barracks. No single architectural style dominates or reflects the regional styles or local climate.

The Signal School buildings are of a distinct style that will adapt well to the proposed style for Fort Gordon. Educational buildings including basic training facilities will be contemporary versions of the regional architectural style, utilizing brick and metal roofs. Barracks will be the same except more residential and informal in appearance; and less institutional. Barracks must have operable windows for natural ventilation, contributing to their residential appearance however, educational buildings shall have minimum window areas.

#### TYPES OF MISSION SUPPORT AREAS

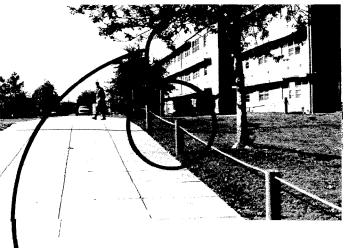
There are four basic types of Mission Support Areas and they are:

Ranges, which are specialized training grounds.

Training grounds, which hold a broad variety of specialized training structures and equipment.

Barracks areas, which house short and long term military personnel as well as dining and administrative functions.

The Signal School, which is a series of classroom and administration buildings.



IN THIS AREA THE STREWALKS ARE OF ADEQUATE SIZE FOR TROOP MOVEMENT, LANDSCAPING IS STARSE AT BEST.

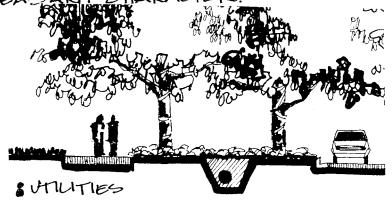
ALTHOUGH THIS IS ONE OF THE EFFER PETESTRIAN CONTROL DEVICES, THIS ILLUSTRATES HOW DOMINANT THEY BE-LOME IN THE LANDSCAPE.

THE ANGLES OF THE ADAPTED ROOFS AND THE STANDING SEAM MATERIAL RELATE TO A REGIONAL ARCHITECTURE.



TELEPHONE POLES AND OPEN DITCHES DOMINATE THE STREETSCAPE.

WHEN UTILITIES ARE PLACEDUNDER-GROUND-SIDEWALKS ENLARGED-AND TREES PLANTED-THE STREET TAKES ON A DEAGANT CHARACTER.



## **Specific Objectives**

The primary objectives for the Mission Support Land Use Zone are to;

- 1. Provide the soldier/student with attractive and efficient areas in which to live, study and perfect technical skills.
- 2. Provide the setting for a highly specialized environment that is compatible with the larger surrounding community.

More specific objectives for improving the quality of the visual environment at Fort Gordon are;

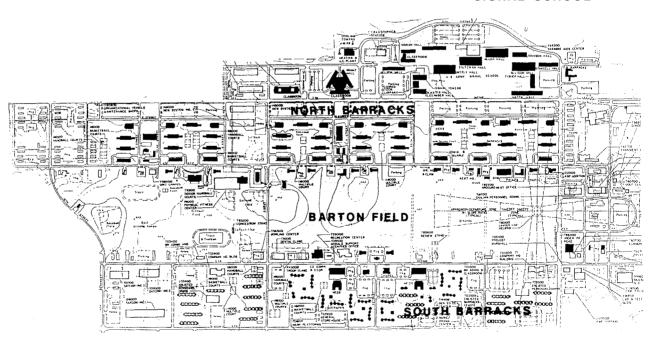
- 1. That the overall layout of barracks areas provide for small open space and physical recreation areas. Also that adequate parking space be planned and that space for possible future parking needs be identified and preserved.
- 2. That a well thought out troop/pedestrian circulation system with oversized walks for marching formations be provided. This system should strongly consider the actual or projected circulation patterns rather than imposing a rigid grid on each area.
- 3. That barracks areas receive an increased level of architectural design and renovation and the established areas be relandscaped to create a more desirable external appearance.
- 4. That individual unit storage buildings and lockers be consolidated into small central storage areas that are screened or are architecturally compatible with the adjacent buildings.
- 5. That units be required to draw from standard site furnishing the necessary items and materials to construct individual seating and outdoor use areas within their assigned grounds and that the colors of these areas be compatible with those of adjacent buildings.
- 6. That all utility structures be located in low visibility areas or screened through the use of architectural or landscape materials.
- 7. That moderate to high levels of design and materials be used in these areas.
- 8. That 'Small Area' plans for the barracks located north and south of Barton Field be developed.
- 9. A review and renovation of all parking areas in this Zone.

## **Historic Implications**

The preservation of some typical examples of the early architecture of Fort Gordon should occur. No single structures stand out as being exceptional in the original barracks or training areas of the Post.

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary' of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).

#### SIGNAL SCHOOL



PRIMARY- MISSION SUPPORT AREAS

### Housing Land Use Zone

The residential areas of the Post are to present the images of being quiet, private, and secluded. On the whole, they need not be in close proximity to each other, but as blocks, can stand alone. The main theme of any residential area is to come from the site development details and not the buildings, however, a compatible architecture is desired. That theme is to be park-like, open and green. The mixing of housing types is to be avoided. The dominant features of individual neighborhoods are to be the community green spaces, landscaping, and playgrounds. No housing area is to be built along major roadways or adjacent to industrial areas, and a thorough tree and landscape plan should be as evident as roads and sidewalks. The housing area at Fort Gordon is very well laid out with ample room for future development and an emerging community center/recreation areas is well located at its core.

The architectural style is to be residential in scale; informal not institutional, for multi-family as well as single family or duplex units. Buildings will be contemporary in design, borrowing forms from the region. Sloped roofs with overhangs are particularly important since they are the dominant elements of the regional style. Materials will be more varied than with other building types. Brick will still be used as a common and unifying element but Less of it than with Administrative or Community Facility buildings due to economic constraints. A wider range of siding and roofing materials will be permitted as will the color options.

There are four housing areas on Post. They include the distinct subdivisions of Gordon Terrace, McNair Terrace and Olive Terrace, all of which have mixed housing styles. The fourth community is Maglin Terrace, which consists of single family ranch style homes and a group of four homes at nearby Boardman's Lake.

Types of Housing Areas

There are several architectural styles on Post which can be classified as;

Single family Duplex Multi-family

All of which are of a brick veneer or wood frame construction.



THE CLUSTERING OF HOUSING UNITS WILL CREATE MORE OF A NEWHBORHOOD.
WOOD FENCES IN BOTH EXAMPLES ARE USED TO PROVIDE PRIVACT PLANTMATERIAL SHOULD BE LEFT TO GROW NATURALLY SOFTEN SPACE.



PLAT AREAS ARE UN-DEFINED

HERE BERM & SIDEWALK DEFINE PLAT AREA -CHILDREN ARE SAFER.

EXISTING PLAT AREAS ARE
FILLED WITH OUTDATED PLAT
EQUIPMENT - DIMENSIONED
TIMBER FOSTERS IMAGINATION
ECREATIVITY IN CHILDREN

## **Specific Objectives**

The primary objectives for the Housing Land Use Zone are to;

- 1. Provide an attractive, orderly and safe residential community for the dependent families of Fort Gordon.
- 2. Provide a sense of privacy and separation from the larger community.

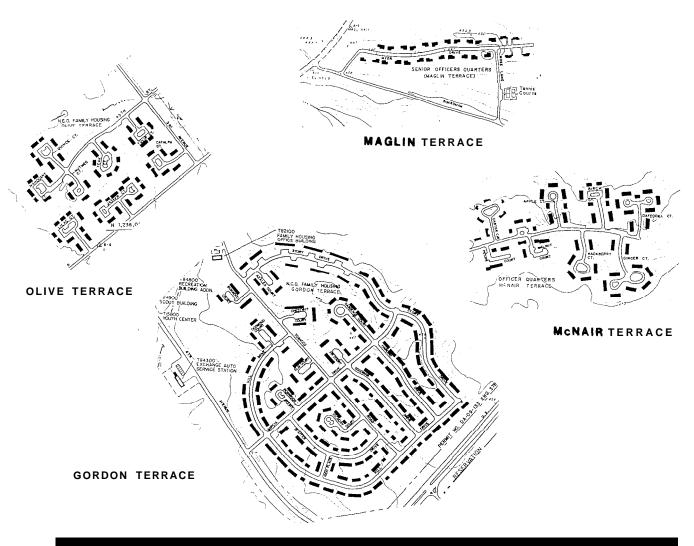
More specific objectives for improving the quality of the visual environment at Fort Gordon are;

- 1. The improvement of external walls and storage facilities at some housing units.
- 2. The screening and/or relocation of utility equipment on the grounds and attached to the housing units.
- 3. A general relandscaping of the grounds and parking areas.
- 4. A restudy and improved capacity for al.1 parking areas in this Zone.
- 5. An improved open space and playground system in these areas.
- 6. Improved pedestrian and bicycle access systems within the Zone and connecting to the larger Post.
- 7. Improved entry areas to each of the four housing areas.
- 8. Traffic signal devices be installed for exiting these areas at the intersection of 45th Street and 4th Avenue.
- 9. That any new housing development occur near or in the established Housing Zone.
- 10. That residents be encouraged to install permanent Landscape material from the approved Lists, and that these plants be provided through the self help program.

## **Historic Implications**

The only original housing that exists on Post are the officers cottages located behind the old Post Headquarters building in what is now the Administrative Land Use Zone. There are no other significant structures in the housing areas.

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).



### **Open Space Land Use Zone**

The single most important aspect that open space must convey is that it is a planned system and not created by default. It is to be organized and serve to tie together the destinations that exist on Post. This variety of spaces calls for different images, one for a parade field another for forest buffer, but the overriding theme is to be that each area is a planned and appropriately maintained space. On a smaller scale, forecourts and plazas will be thought of as an integral part of the building they serve, and are to appear to have been planned as part of that destination. The opportunities for a strong formal open space system, at Fort Gordon are excellent. The forms and axes of Barton Field, the 29th Street mall, and the open field in front of the Signal School provide the basis of the system.

There are a number of other open spaces serving a broad range of functions on Post. The identifying elements of each are that they are not occupied by a major structure and have identifiable boundaries. Some are planned, formal spaces, while others are irregular, "left over" spaces. Each open space is to have at least one planned purpose, but a variety of purposes is encouraged. Unused spaces will be allowed to revert to natural, forested conditions, or will be planted with desirable shade trees species so that when the land is used for future buildings a forest matrix is present for design consideration.

The Open Space Land Use Zone includes the important entry drives and gates that are the areas of first impression for most visitors to Fort Gordon. The character of the grounds, the landscape and to a lesser degree the architecture is first presented during these entry sequences. Because of this, a much greater consideration and a more intense level of design and landscaping is required.

#### TYPES OF OPEN SPACES

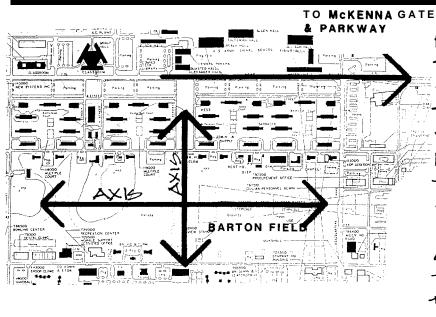
Open spaces can most easily be classified by intended use, of which there are two catagories.

Active, which includes recreation, ceremonial and training grounds or highly specialized open areas such as entry drives and parkways.

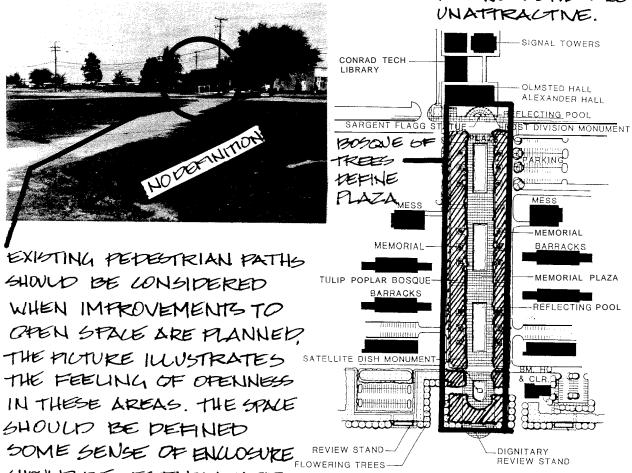
These areas are usually quite formal in design.

Passive, which includes parkways, parks, cemeteries, forests, or abandoned lands.

Some of these areas also receive a high level of formal design, but are much less structured in their use.



BAKTON FIELD 19 THE MAJOR OPEN SPACE ON POST. THE LATOUT AND DE-VELOPMENT OF THE POST HAS RESPECTED THIS GREENSPACE THE SPACE IS TOO MASSIVE-IT BE-COMES A VASTIN-TRAVERSED HAIR THE POWERLINES AT THE WESTEND ARE UNATTRACTIVE.



CHOULD BE ESTABLISHED.

PROPOSED MEMORIAL PLAZA

REVIEW STAND

## **Specific Objectives**

The primary objectives for the Open Space Land Use Zone are to;

- 1. Establish an apparent planned system of outdoor ceremonial and recreational spaces.
- 2. Provide attractive settings for and frame views of structures on Post.
- 3. Provide spatial variety and relieve the monotony of repetitive buildings.

More specific objectives for improving the quality of the visual environment at Fort Gordon are;

- 1. The reorganization and improvements to Barton Field Parade Ground, and the School green along 7th Avenue.
- 2. Renovation of, and a tree planting program for the Post golf course adjacent to the primary entry drive.
- 3. The creation of a major Monument/Memorial space in the open ground east of 29th Street which connects the Signal Towers complex to Barton Field.
- 4. The relocation of the ceremonial reviewing stands to the southern end of this proposed memorial plaza.
- 5. The placing underground of overhead power-lines in high visibility locations.
- 6. An overall review and renovation of parking facilities at all points of recreational activity on Post.
- 7. The relandscaping of such facilities and the establishment of an organized park system for such active recreation uses.
- 8. The renovation of the facility at Clark Hill Lake.
- 9. That a system of pedestrian and bicycle paths be established in this open space system to link the various Land Use Zones of the Post.
- 10. That the Bush Field Air Terminal be landscaped and generally renovated.
- 11. That the main entry drives leading from Gates 1, 2, and 5 be reland-scaped and generally improved.

- 12. That in the planning of all new structures and the layout of roads and utilities, the creation of open spaces as elements of an over all system are to be identified and designed as a part of that particular facility's program.
- 13. That existing open spaces be protected from encroachment by non-appropriate structures wherever practical and that they be proposed for general redesign and renovation through signage, landscaping and circulation improvements.
- 14. That many spaces which are now open grassed areas but do not serve a valid park, foreground, recreation, or linking function be allowed to revert to forest conditions through an active replanting and successional field assistance program.
- 15. That the cost of re-establishing such forest conditions be included in building demolition proposals.
- 16. That buildings such as snack bars and toilets located in open spaces, should be designed to blend with the landscape as much as possible, using appropriate detailing and materials.
- 17. That a series of small passive parks be developed in or near housing areas and community facility centers. And that small formal common grounds be established in central areas of troop housing areas.

## **Historic Implications**

The original street layout of Fort Gordon created the major Open Space of Barton Field Parade Ground. Fort Gordon's first mission during W.W. II, was to train armored units which required this monumental space for their review. The integrity of the field has been slowly eroded over the years and a number of efforts have been made to use large parts of it for other purposes. This central image maker of the Post is to remain and be renovated with only minor changes in its size and use being permitted.

Mission Support

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).

### Industrial Land Use Zone

Industrial areas on Post are primarily for storage or maintenance purposes and are, by their nature, active work zones that the general population rarely encounters. Utilitarian in appearance, these yards often accommodate a wide variety of equipment and structures that do not require a coordinated unified look. The primary layout determinant of industrial areas lies in a functional vehicular circulation system. The points of contact with the larger Post provides the principal image of each such zone.

The visual theme of these mixed utility, production and storage areas is to be downplayed and reduced in impact. They are to have the character of an industrial park. The point of exposure to the community at large is to be little more than an entrance and an architecturally attractive, or landscaped fence or wall. A consolidation of industrial uses away from the central areas of the Post is needed, with one or several secure points of entry being estab-The benefits are practical as well as visual, being the increased pockets of security provided for such an open Post as Fort Gordon. industrial parks are to be a more secure location for critical utility and communications structures that are now vulnerable to disruption. of entry will be landscaped, and extend to at least the administrative/receiv-Additional green pockets are to be located near ing areas of the park. concentrations of employees, in now unused spaces. The majority of these areas will retain, however, their utilitarian image. There is an abundance of these areas on Post and the total amount of industrial space is to be reduced and consolidated.

The architectural character for industrial buildings, more than any other type, is frequently influenced by functional and economic constraints. To preserve a high quality image for the Post as a whole, industrial buildings which are located in other Land Use Zones or located along major arteries are to have a very high quality appearance. When located in other Land Use Zones, the architectural character will be the same as stated for that particular Zone. When located along a major artery, the building character will be the same as for administrative office buildings as viewed from the roadway but only where screening or separation is not possible. This appearance can be facilitated by locating the office portion of the building along the main artery side of the building. Industrial buildings not visible from other areas will have a more utilitarian appearance, but will still have some of the common materials, brick and metal roof/siding, particularly at the main entry to the building.

#### TYPES OF INDUSTRIAL AREAS

The three basic types of industrial operations on Post usually share the design feature of being a series of utilitarian buildings by a large yard and enclosed by a chainlink fence. The three types are:

Storage yards, which provide for vehicle and material storage.

Shops, which house fabricating, assembly and maintenance operations.

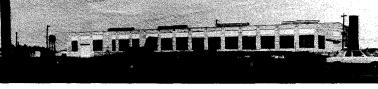
Warehousing, which provide covered storage.

THE CHAINLINK FENCE WITH THE BARBED WIRE CAP AND THE ORIGINAL WOODEN WAREHOUSE STRUCTURES ARE THE DOMINANT VISUAL FEATURES IN THE INDUST-

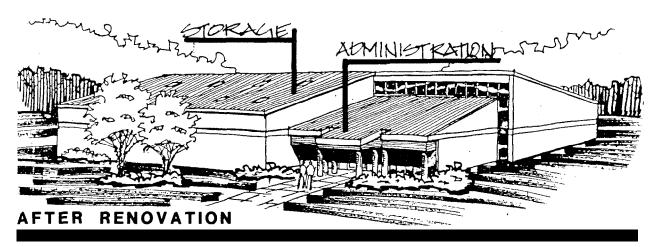
> RIAL ZONE THE INSERTION OF VINTLUAD SLATS WILL IMPROVE THIS FENCE.

IT IS IRRATIONAL TO THINK THAT ALL WAREHOUSE FACILITIES WILL BE UP-GRADED, BUT THOSE WHICH ARE VISUALLY PROMINENT

AND FREQUENTY VIBITED 540UUD BE ALTERED TO IMPROVE THEIR APPEARANCE.



**BEFORE** 



## **Specific Objectives**

The primary objectives for the Industrial Land Use Zone are to:

- Provide for storage or maintenance needs of the Post in a remote, low visibility location.
- 2. Provide a single major area, as an 'Industrial Park' facility that is rarely encountered by the Post population.
- 3. Provide a clean, well organized work space for industrial activity employees of the Post.

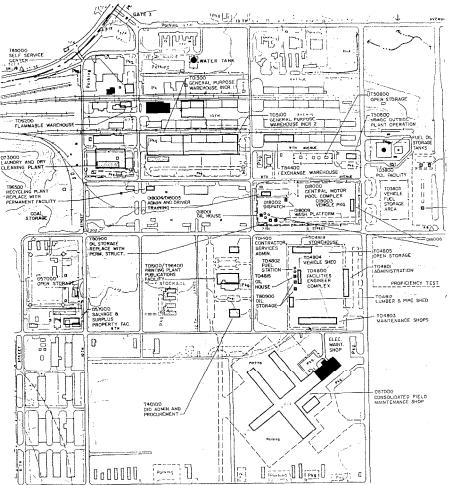
More specific objectives for improving the quality of the visual environment at Fort Gordon are;

- 1. The consolidation of industrial operations into one major 'Controlled Access' compound.
- 2. That existing smaller facilities throughout the Post be relocated to this central facility.
- 3. The primary entry(s) to this facility, and the visible perimeter fence be given a high level of design treatment and landscaping.
- 4. That external employee parking areas be established near pedestrian entries and that these car lots be well landscaped and lighted.
- 5. That office and administrative structures be located in or near these perimeter lots and be of a higher architectural quality than the industrial structures they are attached to.
- 6. That outdoor seating and appropriate lunch time recreational areas be provided near concentrations of workers.
- 7. That the internal arrangement of these industrial compounds is to be neat and orderly, on an established grid that can accommodate rail and truck traffic.
- 8. That industrial activities that are visited regularly by the Post population such as self help centers be located near the entries to the designated Industrial Park.
- 9. That remote industrial facilities such as an electrical substation be screened, or take on the character of the surrounding zone as much as possible.

## **Historic Implications**

The existing industrial areas of the Post are historically significant only in the fact of their compact efficient layout. Several of the original warehouses are architecturally interesting. The layout of this area is practical today and should not be disturbed.

Design of new elements or renovation of existing elements within or adjacent or historically significant areas should be completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. Renovation and additions in or adjacent to historically significant structures should be completed in consultation with TM-801-2, Historic Preservation Maintenance Procedures and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983).

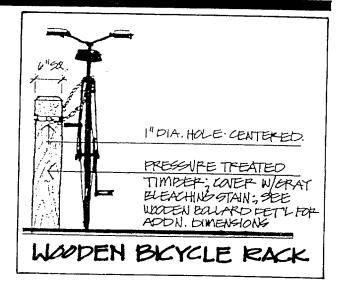


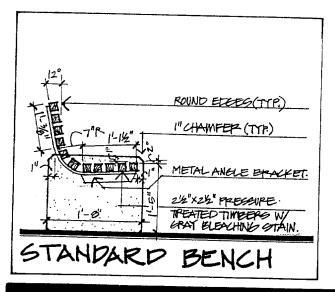
PRIMARY INDUSTRIAL AREA

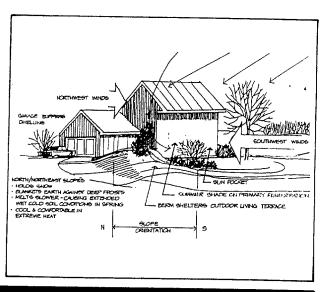
# PART III

# DESIGN GUIDELINES



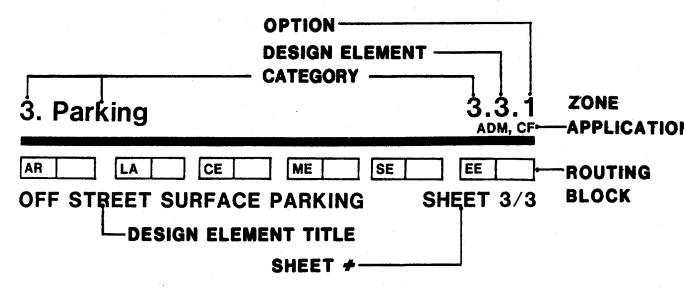






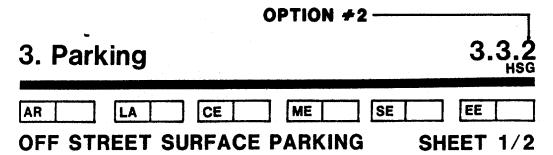
## **General Instructions**

Each page of Design Guidance has the information shown here:



This example is option I and is to be used only in the Administrative and Community Facilities Zones.

Option 2 is to be used only in the Housing Zone. Most Design Elements have only one or at most two options.



The space on each of the <u>design elements matrix pages</u>, marked 'discipline' is to be completed for each contract preparation effort. The routing blocks are to indicate which of the design disciplines; Architects, Landscape Architects, Civil Engineers, Mechanical Engineers, Sanitary Engineers, or Electrical Engineers, that the information is to be sent to. Once the design elements pages have been selected and copied, the appropriate block(s) on each page is to be checked as additional instruction to the A/E.

On the back of each matrix page there is a blank Design element format page for that zone. These are to be used when revising or updating Design Element information, or for adding entirely new information to the guide.

1. Buildings &		DISCIPLINE LAND USE ZONE										
Courtyards	AR	LA	CE	ME	SE	EE	ADM	CF	MS	HSG	90	IND
1. General Information 2. Color & Materials 3. Architectural Character 4. Climatic Conditions							1 1 1	1 1 2 1	1 1 3 1	1 1 4 1		1 1 5
5. Building Signage 6. Outbuildings 7. Renovations & Additions 8. Entrances & Access 9. Covered Walkways							1 1 1	1 1 1	1 1 1	1 1 2	2	
O. Plazas & Courtyards 1. Adaptive Design 2. Mechanical Equipment & Building Services 3. Compatibility							1 1	1 1 1	1 1	2		1 1 1
										-		

2. DISCIPLINE **Roads & Paths** LAND USE ZONE S S S LA CE CE SE EE General Information 2. Parkway/Highway 3. Primary/4 Lane Secondary/2 Lane Tertiary/2 Lane 6. Cul-De-Sac 7. Rural Road 8. Patrol Road 9. Sidewalks 10. Ramps & Steps 11. Bike Path System 12. Bank Stabilization

3. DISCIPLINE LAND USE ZONE **Parking** S Ś S ييا 1. General Information 2. Circulation & Layout 3. Off Street Surface Parking 4. On Street Parallel Parking5. Residential Driveways 6. Loading Docks 7. Landscaping

4. DISCIPLINE Landscaping LAND USE ZONE S Ś S ш LA CE CE SE E E E General Information
 Plant Material/Trees 3. Plant Material/Shrubs 4. Plant Material/Groundcovers
5. Street & Shade Trees
6. Screening 2 2 1 7. Erosion Control 8. Reforestation 9. Entry Planting 4 10. Foundation Planting 2 3 4 11. Pedestrian Control 2 12. Protection & Clearing 1 13. Irrigation
14. Pruning
15. Staking
16. Edging 1 1 17. Lawn 18. Outdoor Lounge areas

5. DISCIPLINE **Site Furnishings** LAND USE ZONE S Ś ш S E SE CE General Information 2. Bench Wall Retaining Wall 1,2 2,3|1,2,Fence 6. Game Table & Seats 7. Picnic Table 8. Shelter/Kiosk System 9. Drinking Fountain 2 10. Trash Receptacle 11. Bollard 2 12. Lawn Edger 1 13. Guard Rail 14. 15. 16. Sign Post Base Bicycłe Rack 1,2 2 1,2 2 Dumpster Enclosure 17. 18. Mail Boxes 1 Playgrounds 19. Monuments & Plaques ī 20. Flagpoles 21. Guide on Stand

6. DISCIPLINE Signage LAND USE ZONE S S S ш E SE CEAR Σ 1. General Information 1. General Information
2. Typeface/Symbols
3. Entry Sign
4. Headquarters/Area
5. Prohibitory Warning
6. Exterior Identification
7. Centralized Facilities
8. Changeable Message Board
9. Facility Entransport 1 9. Facility Entrance 10. Building Numbers 11. Recreation Facility 12. Bus Route 13. Parking/Curb Markings 14. Exhibit/Information
15. Pedestrian Information
16. Street Signs
17. Temporary Signs

DISCIPLINE **Utilities &** LAND USE ZONE Lighting SW Ś S L General Information Light Pole Light Bollard 1 3. 1 4. Fixture 5. Location & Spacing 2 4 3 6. Swales & Channels 2 Grates & Inlets 7. 8. Retention Basins 1 9. Traffic Signals 2 10. Utility Structures 11. Hook Ups 12. Utility Vaults

DISCIPLINE **Buildings &** LAND USE ZONE **Courtyards** S S Щ E SE CE General Information Color & Materials 2. 3. Architectural Character Climatic Conditions Building Signage Outbuildings 6 Renovations & Additions Entrances & Access Covered Walkways 9. 1 Plazas & Courtyards Adaptive Design 1 Mechanical Equipment & Building 2 Services Compatibility

1 . 1 . 1 **ADM,** CF, MS, **HSG,** IND

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### **GENERAL INFORMATION**

SHEET 1/6

#### **GENERAL**

The purpose of this section is to describe ingeneral terms, the architectural character included for Fort Gordon. The architectural character intended for each Land-Use Zone will be described and illustrated in more specific terms in subsequent sect ions. This section deals with design parameters common throughout the Visual District. The architectural character and the exterior materials will vary depending on the function. However, where a building of one particular function is located in a Land-Use Zone of a different function, that building must be designed to comply with the design parameters for the Zone it is located in. For example, if an industrial type building is located in Mission Support area, that building must have the architectural character designated for Mission Support, not Industrial.

In general, the architectural character intended throughout the Visual District, will be a contemporary interpretation of the traditional regional architecture. Brick walls and sloped metal roofs will be key design elements. All buildings whether new or renovated, must have a consistent architectural character on all sides. All buildings must be very professional and businesslike in appearance as well as being efficient and relatively maintenance free. The several elements that contribute to a building's overall architectural character will be presented separately in this section: massing, scale, form and fenestration. Exterior materials will be discussed in subsequent sections.

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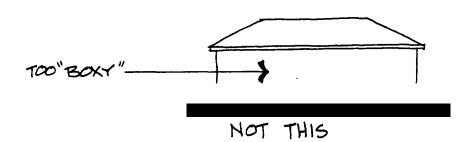
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**GENERAL INFORMATION** 

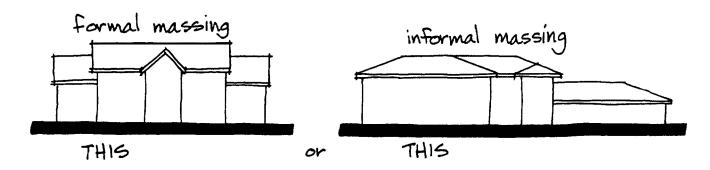
SHEET 2/6

#### MASSING

In designing any building for this Post, "break the box", i.e. avoid designs utilizing one rectangle unbroken mass. Major administrative buildings should have a more formal massing than any other building type, signifying their relative importance. This formal massing is achieved through a more balanced or symmetrical design with less articulation. Except for a new main headquarters building or hospital, no building shall exceed four stores in height.



# \*BREAK THE BOX"



ADM, CF, MS, HSG, IND

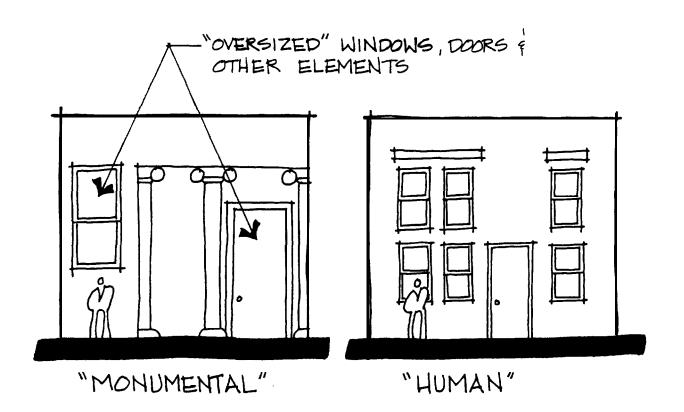
AR LA CE ME SE EE

**GENERAL INFORMATION** 

SHEET 3/6

#### **SCALE**

Except for major administration buildings, the scale for all buildings will be quite human, not monumental. This human scale is achieved by using small (normal sized) windows, doors, handrails, trim, etc. and also by using normal floor to floor heights and floor to eave heights and an articulation of massing which expresses those heights. For large buildings, human scale is improved to the extent that the mass is broken into smaller elements.



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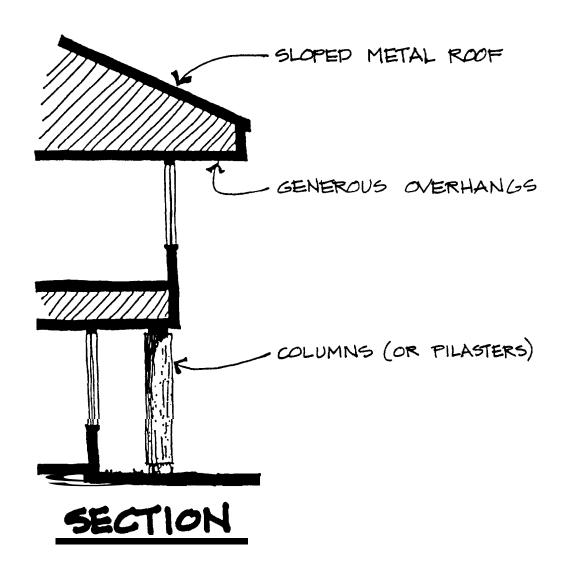
AR LA CE ME SE EE

**GENERAL INFORMATION** 

**SHEET 4/6** 

#### FORM

Forms for all buildings shall be derived from the traditional regional style, but interpreted in a contemporary manner. The most significant form to be used is sloped roofs, either hip, gable or shed, or a combination thereof. Roof pitch shall be moderately steep, similar to the local regional style. "Mansard" roofs are specifically prohibited. Building forms shall also include pilasters or columns (either round or square) with broad overhangs or "porch" appearing elements. Overhangs will be used to enhance the overall sculptural effect of the building. See Section 1.4.1 "Climatic Considerations" for additional discussion of overhangs.



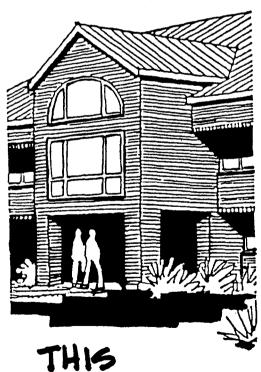
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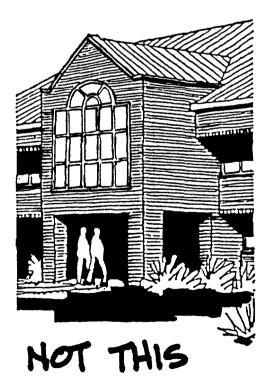
#### FORMS

Arched forms are acceptable but only as accents. Good examples of arched elements are windows and louvers. In terms of detailing, currently "fashionable" or "trendy" forms, such as Post Modern will be avoided.

#### CONTEMPORARY



#### POST MODERN



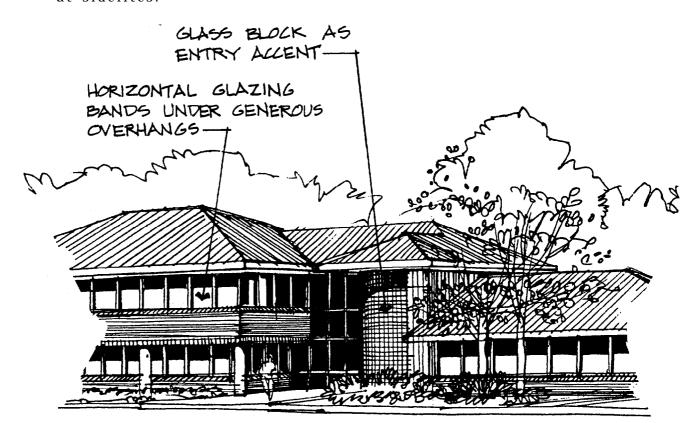
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#### **FENESTRATION**

Glazing shall be designed in large areas, not "windows", usually continuous horizonal bands constructed with aluminum storefront. Mullion shaping should provide a good module for internal layout. Glazing shall be designed to be shaded from the summer sun on the south, east, and west sides of each building, however, west facing glass in particular should be minimized. Shading is to be accomplished with either layered bands of recessed wall (inverted "wedding cake") or with sculptural recessed pockets. See Section 1.4.1 for additional information regarding solar shading. Glass block, not necessarily shaded may be used as building accents, but only where a clear 'view from the interior is not required.

All dwellings or sleeping rooms in any building must be provided with operable windows. In all barracks, multi-family units, duplex units, or single family units for low ranking officers, windows will be aluminum horizontal sliding or single hung. Houses for high ranking officers shall be vinyl or aluminum (exterior) clad wood windows, either casements, single or double hung or combination fixed glass/awning type windows. Muntins will be avoided except at sidelites.



1.2.1 ADM,CF,MS,HSG,IND

AR LA CE ME SE EE

### **COLOR & MATERIALS**

SHEET 1/9

#### I. GENERAL INFORMATION

- The purpose of this section is to identify the palette of materials and their range of colors to be used throughout the Post. A unification of design will be achieved by limiting this choice of colors and materials, and yet the range of choices is sufficient to Immediately adjacent buildings must not have allow for variety. completely identical materials and colors. This section will also discuss specific design criteria for the various materials. It is not the purpose of this section to discuss the applicability of the various materials for the different land-use zones. For the applicability refer to the sections discussing "Architectural Character", 1.1.1 thru Where colors are listed by a specific manufacturer, other equal materials with identical colors from other manufacturers are acceptable. Materials and their colors will be discussed as relates to various building elements: roofs, walls, columns/pilasters, and trim.
- B. Buildings will not typically have more than three basic materials and colors, except for very limited use of a fourth accent color. Buildings shall never have more than four basic materials and colors on any one facade, glazing excluded.
- C. Never change materials and/or colors in the same plane unless separated by a deep reveal (2" deep by 3 1/2" wide minimum).
- D. Where selected, accent colors shall be used in very limited quantities. They shall be used on reveals, trim, window frames, etc. The use of accent colors is not required on any building.

1.2.1

ADM, CF, MS, HSG, IND

AR LA CE ME SE EE

### **COLOR & MATERIALS**

SHEET 2/9

#### II. ROOFS

- A. Standing Seam Metal equal to Merchant & Evans Industries, Inc., standing seam or batten system, colors as follows.
  - 1. Patina Green 6090, #24373



2. Classic Bronze 6080, #20041



- B. Fiberglass/Asphalt Compositions Shingles equal to GAF Timberline, colors as follows:
  - 1. Heather Blend
  - 2. Slate Blend
  - 3. Charcoal Blend

1.2.1 ADM,CF,MS,HSG,IND

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### **COLOR & MATERIALS**

SHEET 3/9

#### III. WALLS

- A. <u>General</u>: In this section the term "walls" will include all vertical. surfaces including large fascia areas but not including glazing. Walls shall also include sharply slanted or corbeled surfaces such as might occur above or below glazing.
- B. Brick: Any of the below-Listed in order of priority.
  - 1. Merry Brothers Brick Dover Grey
  - 2. Carolina Ceramics Chestnut
  - 3. Richtex Brick 801
  - 4. Mortar color may be dark grey, "straw" or any color which approximates the brick color. White and light grey are unacceptable. Generally, brick is to be laid in running bond but accents shall include rowlock or soldier courses and/or corbeling.

1.2.1 ADM,CF,MS,HSG,IND

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**COLOR & MATERIALS** 

SHEET 4/9

#### C. Cementitious Materials:

- 1. <u>Stucco</u> equal to Premix Marbletite Manufacturing Co-colors as follows listed in order of priority:
  - a. Seminole Sand BK 60, #23531
  - b. Taos Tan 80, #20372
  - c. Oyster Whites 751, #27780

2. "Synthetic Stucco" - equal to "Drivit", colors shall match the three colors noted above for stucco.

#### 3. Concrete:

- a. Poured-in-place with paint finishes to match the three colors needed above for stucco.
- b. Tilt-up concrete with paint finish to match the three colors noted above for stucco.
- c. Pre-cast concrete with integral color or paint finish to match three colors noted above for stucco.

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1.2.1
ADM,CF,MS,HSG,IND

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**COLOR & MATERIALS** 

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SHEET 5/9

D.	Viny	l Siding - equal to Georgia Pacific colors listed in order o	£
	1.	Almond, #23578.	
	2.	Gray, #26492.	
	3.	Blue, #25526.	
	4.	White, #27880.	
	5.	Clay, #20372.	

1.2.1 ADM,CF,MS,HSG,IND

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COLOR	& MATE	RIALS		SHEE	T 6/9

6. Cream, #23717.

- E. <u>Metal Siding</u> equal to Merchant & Evans Industries, Inc., any configuration; of vertical siding, ribs may be turned in or out, colors as follows, listed in order of priority:
  - 1. Pueblo Tan 6060, #23522.
  - 2. Patina Green 6090, #24373.
  - 3. Classic Bronze 6080, #20040.



4. Brick Red 6070 - "Accent" only, #20152

1.2.1

ADM, CF, MS, HSG, IND

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### **COLOR & MATERIALS**

SHEET 7/9

F. Wood Siding - is to be painted Cream, #23717 with Medium Grey/Brown, #20372 trim.

- IV. COLUMNS OR PILASTERS
  - A. Brick same 3 choices as noted above for walls.

B. Cementitious Materials - same as choices as noted above for walls.

1.2.1 ADM,CF,MS,HSG,IND

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**COLOR & MATERIALS** 

SHEET 8/9

V. TRIM

- A. General trim shall include such items a fascias, corner trim, door and window trim, and in some cases, flashing. Trim materials are listed in order of priority, based on long term disability.
- B. Vinyl (with integral color) usually available in pre-manufactured shapes used for housing. Color for housing may be any of the six colors noted above for wall siding. For other buildings, colors shall be equal to those manufactured by Georgia Pacific listed below in order of priority.
  - 1. Clay, #20372.
  - 2. Cream, #23717.
- C. Aluminum including window framing shall have a high quality baked on paint finish, colors to be as follows based on Federal Standard No. 595a, and listed in order of priority:
  - 1. Dark Brown, #20059.

1.2.1

ADM, CF, MS, HSG, IND

AR LA CE ME SE EE

**COLOR & MATERIALS** 

SHEET 9/9

2. Creme, #23717.

3. Medium Grey/Brown, #20372.



4. Deep Red - "Accent" only, #21136.



D. Painted Wood - colors to be same as noted above. For aluminum paint type as appropriate for the particular use.

1.3.1

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### ARCHITECTURAL CHARACTER

SHEET 1/6

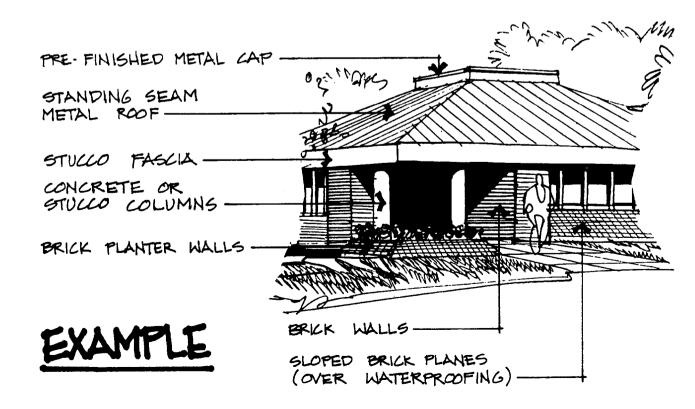
#### GENERAL

The purpose of this section is to discuss the architectural character intended for Administrative buildings. Refer to Section 1.1.1 for information regarding various common design elements, specifically massing, scale, form and fenestration.

In general, administrative buildings will be formal in their overall character. Major administrative buildings should be somewhat monumental in scale and very formal in their massing, form, and fenestration.

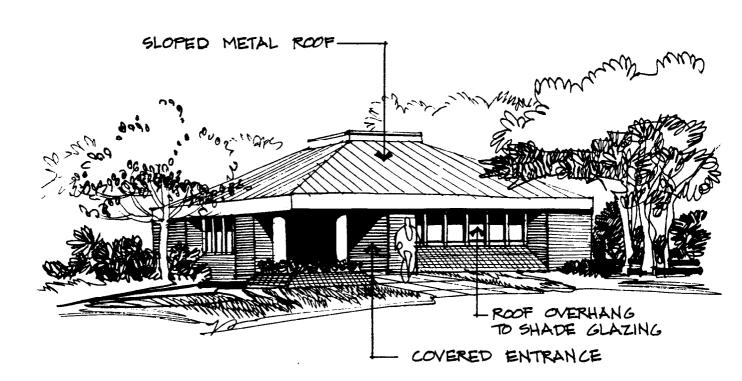
#### **MATERIALS**

In this section, materials will be discussed in a generic manner. For exact colors to be used, refer to Section 1.3.1 for administrative buildings. Wall surfaces shall be primarily brick. Other acceptable wall finishes may be any of several cementitious material sas outliend in Section 1.3.1, but not more than two such additional materials on any one building. Good uses of these cementitious materials are fascias, columns and wall areas under deep overhangs. Roofs shall be standing seam metal.



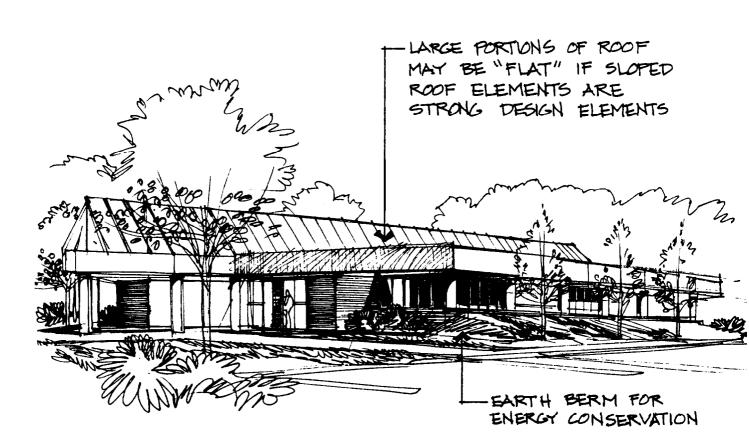
**1.3.1** ADM

ARCHITECTURALCHARACTER SHEET 2/6



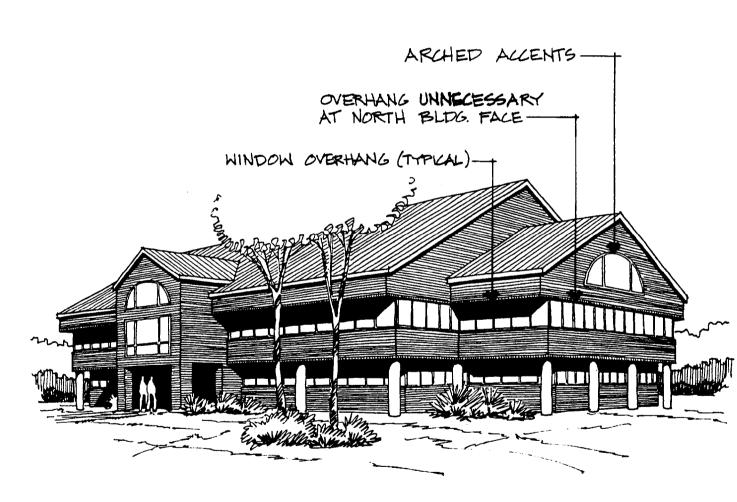
1.3.1

ARCHITECTURAL CHARACTER SHEET 3/6



1.3.1

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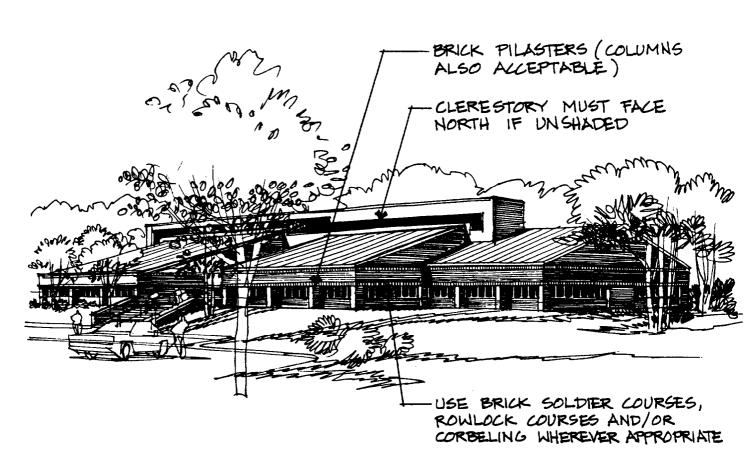


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AR LA CE ME SE EE

**ARCHITECTURALCHARACTER** 

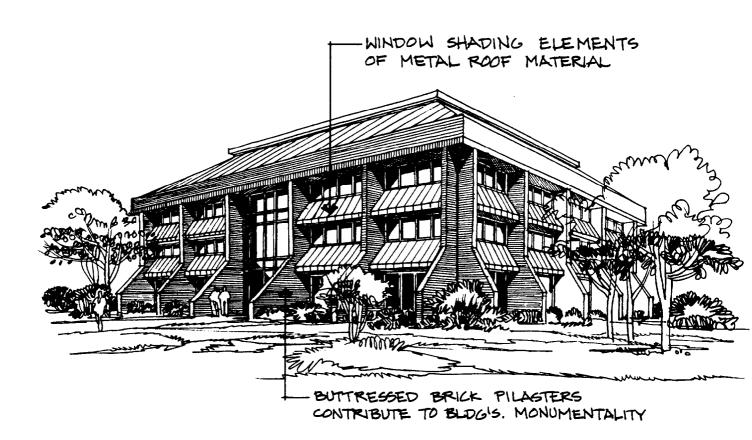
SHEET 5/6



1.3.1

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APCHITECTURAL CHARACTER				SH	FFT 6/6

"MONUMENTAL" STYLE SUCH AS THIS FOR MAJOR ADMINISTRATIVE BUILDINGS ONLY



1.3.2

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### ARCHITECTURAL CHARACTER

SHEET 1/7

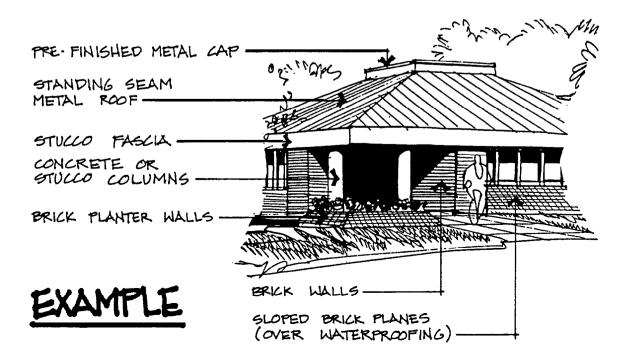
#### **GENERAL**

The purpose of this section is to discuss the architectural character intended for **Community** Facilities buildings. Refer to Section 1.1.1 for information regarding various common design elements, specificly massing, scale, form and fenestration.

In general, community facilities buildings will be quite varied in their architectural character depending on the particular building function. Recreational buildings and day care centers should be very playful in character. Entertainment and retail/service facilities should be very informal but not as playful as recreational and day care. Medical facilities and schools should be more formal than entertainment and retail but still somewhat informal, expecially when compared to administratiave buildings. High use facilities, such as commissaries, should be very bold, almost flamboyant, in character. Conversely utilitarian type facilities such as laundromats should be bery low-key in design.

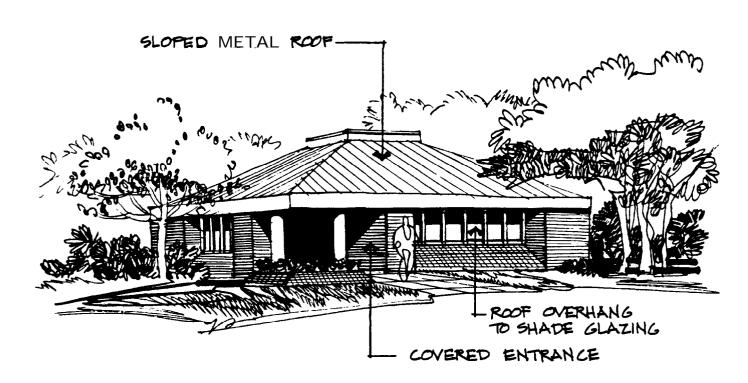
#### MATERIALS

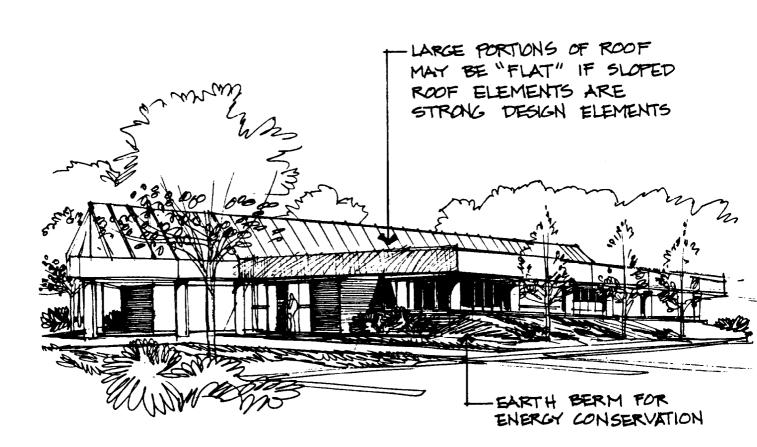
In this section, materials will be discussed in a generic manner. For exact colors to be used, refer to Section 1.3.1 for administrative buildings. Wall surfaces shall be primarily brick. Other acceptable wall finishes may be any of several cementitious material sas outliend in Section 1.3.1, but not more than two such additional materials on any one building. Good uses of these cementitious materials are fascias, columns and wall areas under deep overhangs. Standing seam metal roofs are recommended.



1.3.<sub>CF</sub>

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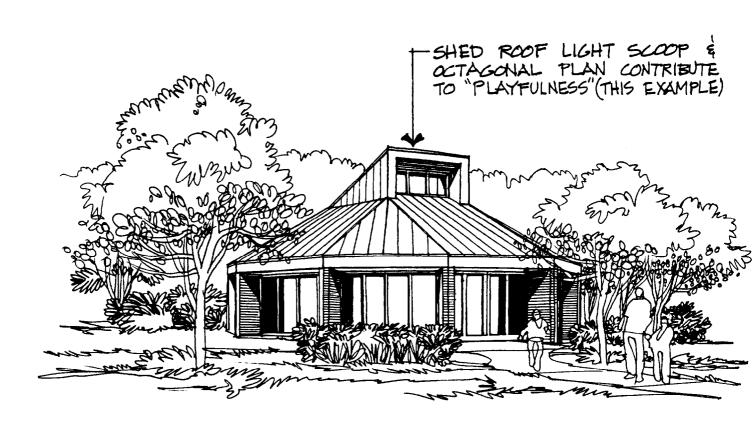




1.3.2

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"PLAYFUL" DESIGNS SUCH AS THIS ARE APPROPRIATE FOR DAY CARE CENTERS, RECREATIONAL FACILITIES, ETC.



**1.3.2** 

AR LA CE ME SE EE ARCHITECTURAL CHARACTER SHEET 5/7

- BROAD ROOF OVERHANG
TO SHADE GLAZING

COLUMNS SUPPORT FLOOR OVERHANG
WHICH SHADES GLAZING

- GLASS BLOCK

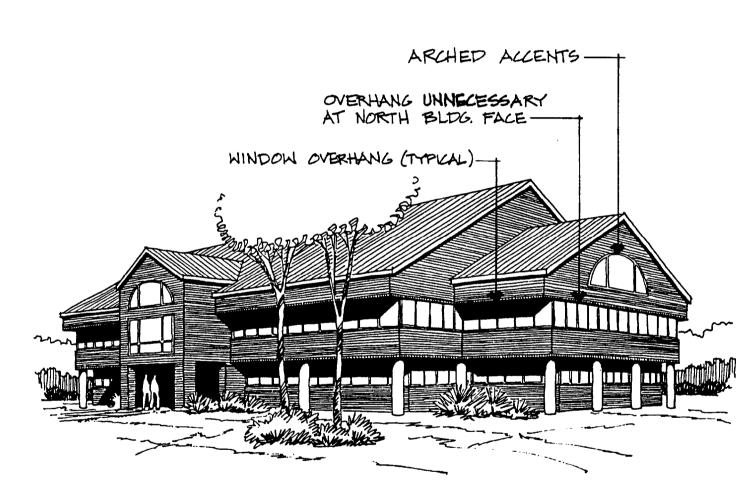
NOTE INFORMAL MASSING

1.3.2

CE ME SE EE AR

ARCHITECTURAL CHARACTER

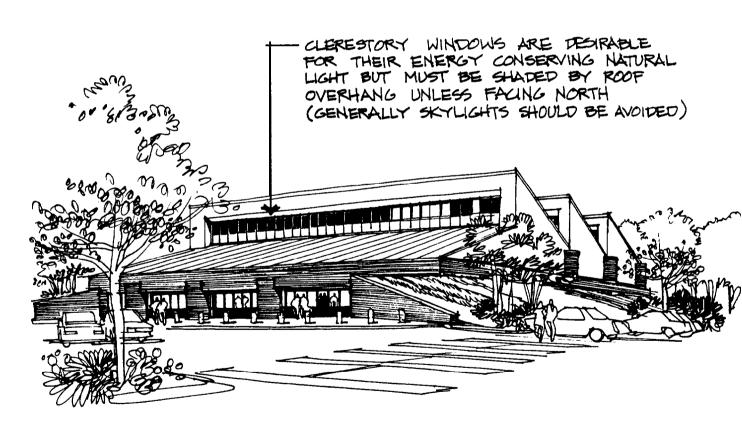
**SHEET 6/7** 



1.3.2

ARCHITECTURALCHARACTER SHEET 7/7

BOLD DESIGNS SUCH AS THIS ARE APPROPRIATE FOR HIGH USAGE BUILDINGS SUCH AS THE POST EXCHANGE OR THE COMMISSARY - NOTE USE OF SHED ROOF FORMS



1.3.3

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### ARCHITECTURAL CHARACTER

SHEET 1/5

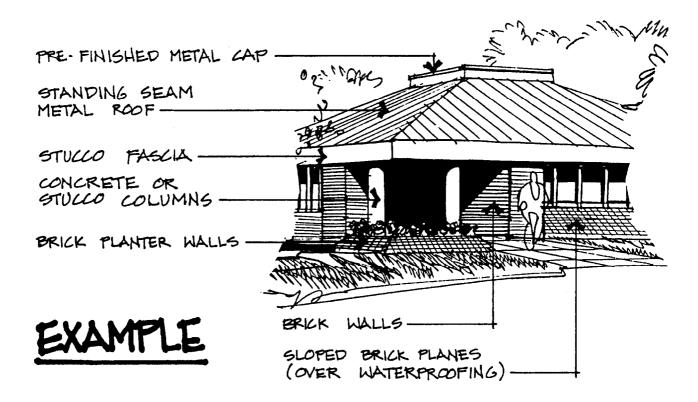
#### **GENERAL**

The purpose of this section is to discuss the architectural character intended for <u>Mission Support</u> buildings. Refer to Section 1.1.1 for information regarding various common design elements, specifically massing, scale, form and fenestration.

In general, mission support facilities will be somewhat informal in their overall architectural character except that headquarters buildings within mission support areas should be quite formal, signifying their relative importance.

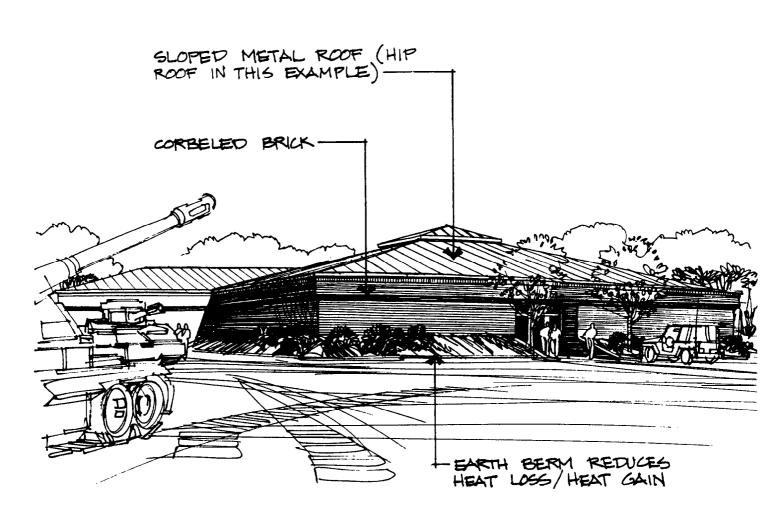
#### MATERIALS

In this section, materials will be discussed in a generic manner. For exact colors to be used, refer to Section 1.3.1 for administrative buildings. Wall surfaces shall be primarily brick. Other acceptable wall finishes may be any of several cementitious material sas outliend in Section 1.3.1, but not more than two such additional materials on any one building. Good uses of these cementitious materials are fascias, columns and wall areas under deep overhangs. Standing seam metal roofs are recommended.



1.3 M3

ARCHITECTURAL CHARACTER SHEET 2/5

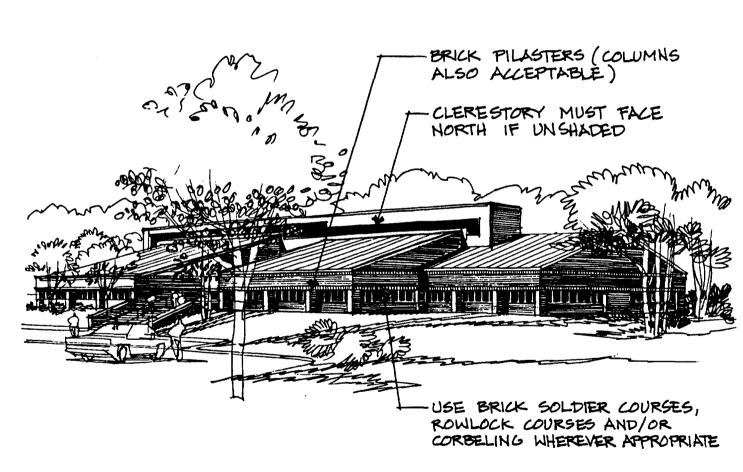


1.3.3<sub>MS</sub>

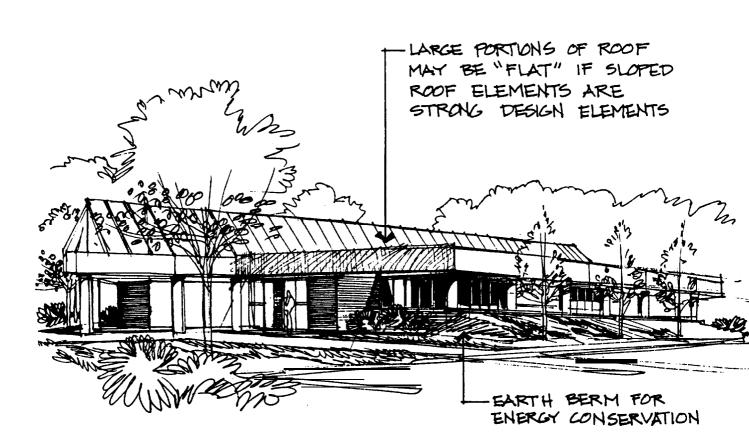
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ARCHITECTURAL CHARACTER

SHEET 3/5



ARCHITECTURAL CHARACTER SHEET 4/5

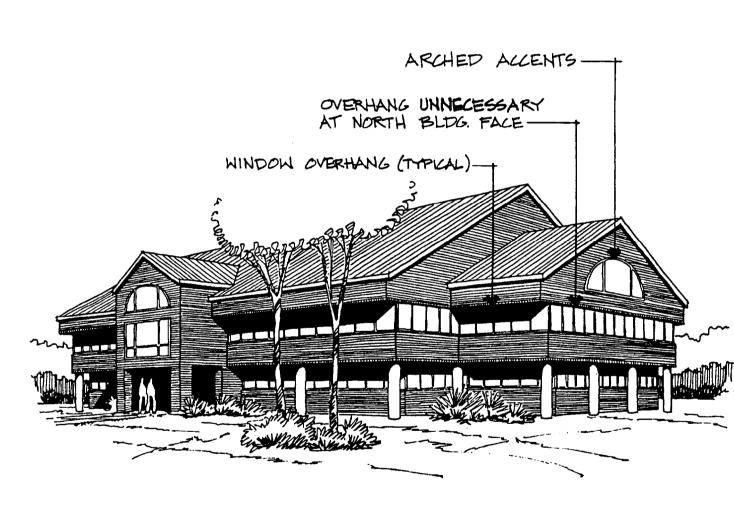


**1.3.3** MS

AR LA CE ME SE EE

ARCHITECTURAL CHARACTER

**SHEET 5/5** 



1.3.4 HSG

AR LA CE ME SE EE

### ARCHITECTURAL CHARACTER

**SHEET 1/4** 

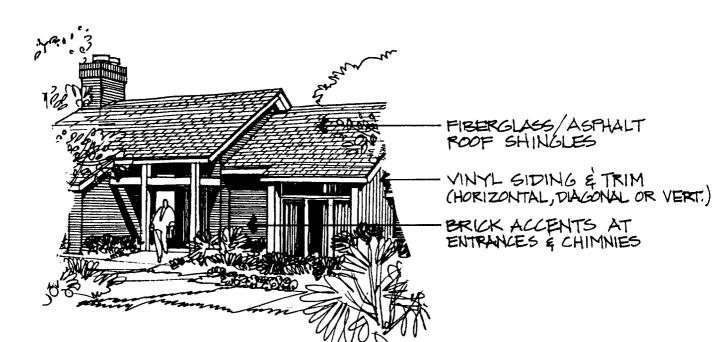
#### GENERAL

The purpose of this section is to discuss the architectural character intended for  $\underline{\text{HOUSING}}$  buildings. Refer to Section 1.1.1 for information regarding various common design elements, specifically massing, scale, form and fenestration.

In general, housing will be very informal ("residential") in appearance. This will be applicable for single family, duplexes, multi-family and bachelor officers' quarters. However, houses for high ranking officers may be somewhat more formal than other housing types.

#### MATERIALS

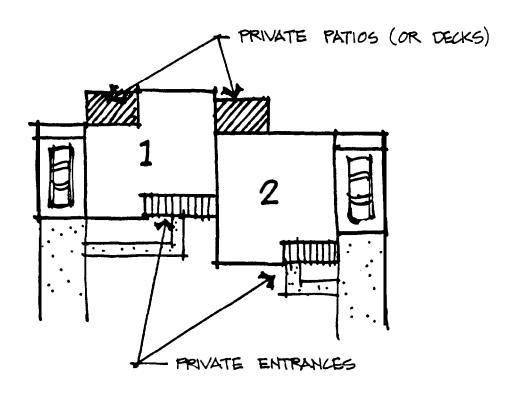
In this section, materials will be discussed in a generic manner. For exact materials and colors to be used, refer to Section 1.3.1. Brick shall be used as a prominent accent material only except for high ranking officers' housing which may be all brick. Brick accents are especially important at entrances. The remaining wall areas shall be either stucco (or synthetic stucco) or vinyl siding (horizontal, diagonal or vertical). Trim shall be either vinyl or painted wood or prefinished aluminum except that vinyl trim shall always be used with vinyl siding. 'Architectural textured' fiberglass/asphalt shingles are recommended.



1.3.4 HSG

AR LA CE ME SE EE ARCHITECTURALCHARACTER SHEET 2/4

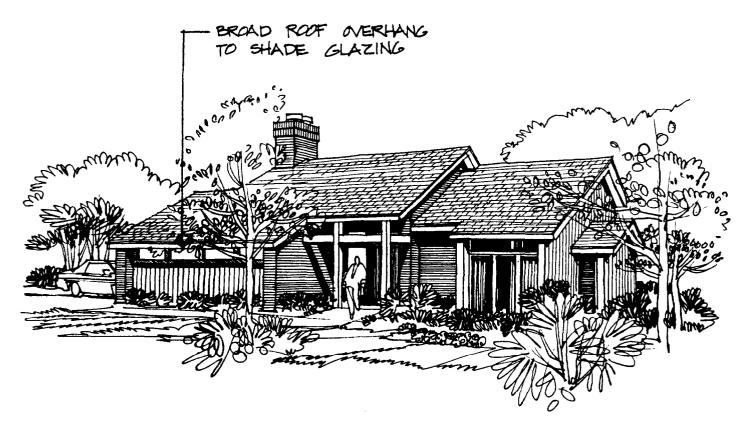
PROVIDE SOME UNSYMMETRICAL DUPLEXES TO BREAK THE MONOTONY OF TYPICALLY SYMMETRICAL UNITS



1.3.4

AR LA CE ME SE EE ARCHITECTURAL CHARACTER SHEET 3/4

THIS EXAMPLE: SINGLE FAMILY HOUSE FOR HIGH RANKING OFFICER



1.3.4

AR LA CE ME SE EE

ARCHITECTURAL CHARACTER

**SHEET 4/4** 

THIS EXAMPLE: MULTI-FAMILY OR B.O.Q.



1.3.5

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### ARCHITECTURAL CHARACTER

SHEET 1/3

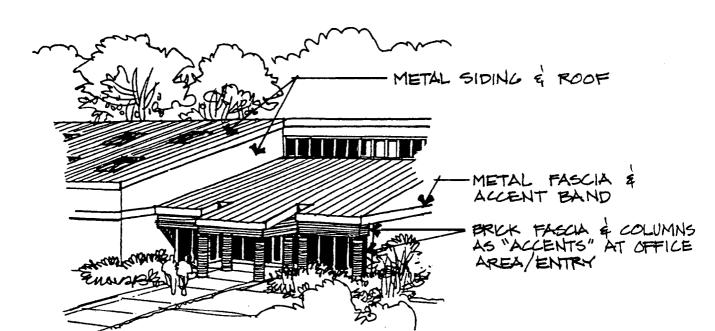
#### GENERAL

The purpose of this section is todiscuss thearchitectural character intended for <u>Industrial</u> buildings. Refer to Section 1.1.1 for information regarding various common design elements, specifically massing, scale, form and fenestration.

In general, industrial buildings will be very informal and somewhat utilitarian in appearance. Industrial buildings shall have the same character as buildings of the Land-Use Zone they are located in, if other than industrial (if screening is not possible), or the same character as administrative buildings if visible from major arteries. This sameness shall extend to exterior building materials, especially, for highly visible sides of buildings.

#### MATERIALS

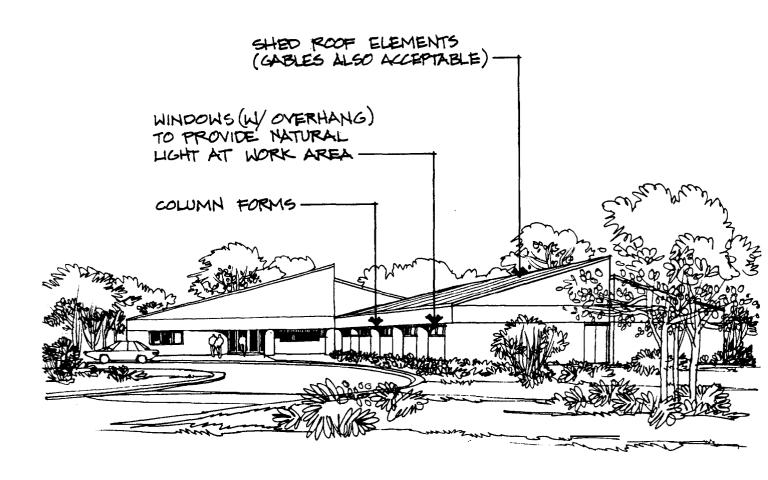
In this section, materials will be discussed in a generic manner. For exact materials and colors to be used, refer to Section 1.3.1. For buildings located well within an industrial Land-Use Zone, or well screened, exterior wall materials will be primarily metal siding or concrete (tilt-up or precast). Brick may be used as building accents, especially at entrances. Metal siding may be standing seam configuration or "shaped" section except for corrugated. Roofing will be standing seam metal. Fascia, trim, etc. will be metal. Standing seam metal roofs are recommended.



1.3.5

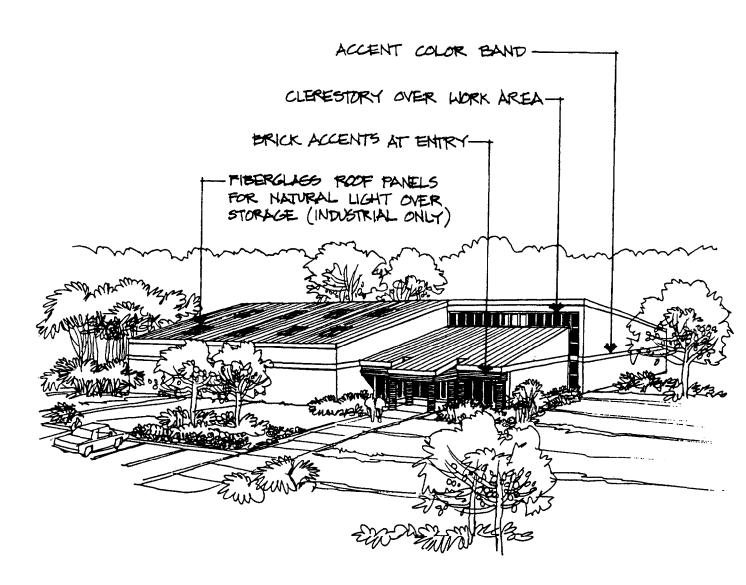
ARCHITECTURAL CHARACTER

SHEET 2/3



1.3.5

ARCHITECTURAL CHARACTER SHEET 3/3



| . 4 . | **ADM,** CF, MS, **HSG,** IND

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### **CLIMATIC CONDITIONS**

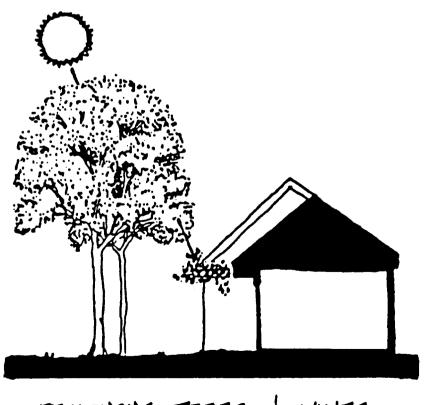
**SHEET 1/7** 

#### GENERAL INFORMATION

The climate for this Post can be described as hot and humid in the summer and cool to cold in the winter. Building and site design should respond to this climate in order to conserve energy in the operation of HVAC systems and also to give buildings a look indigenous to the region while at the same time having a unifying effect on the Post. Several design elements should be incorporated into each building design to accommodate the climate.

#### SOLAR GAIN & SHADING

The most important consideration for building design in this climate zone is controlling the relationship between glazed areas and sunshine in order to let the sunshine in during the winter but block it out during the summer. The first priority for doing this is to insure that glazing is in the shade of deciduous trees or vines on the south, east and west sides of the building.



DECIDUOUS TREES & VINES

| . 4 . | **ADM,** CF, MS, **HSG, IND** 

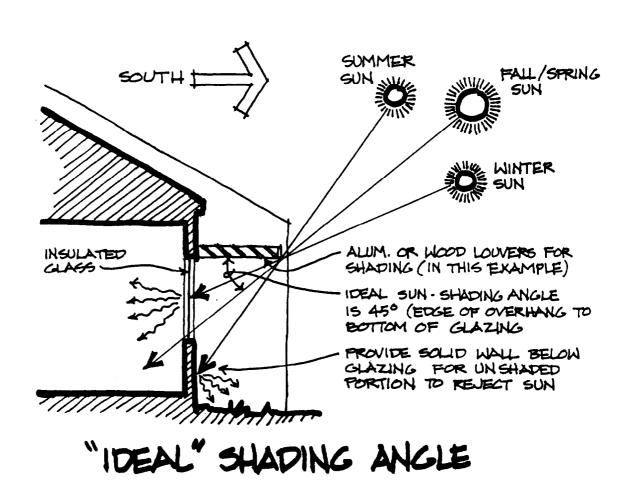
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### **CLIMATIC CONDITIONS**

**SHEET 2/7** 

#### SOLAR GAIN & SHADING

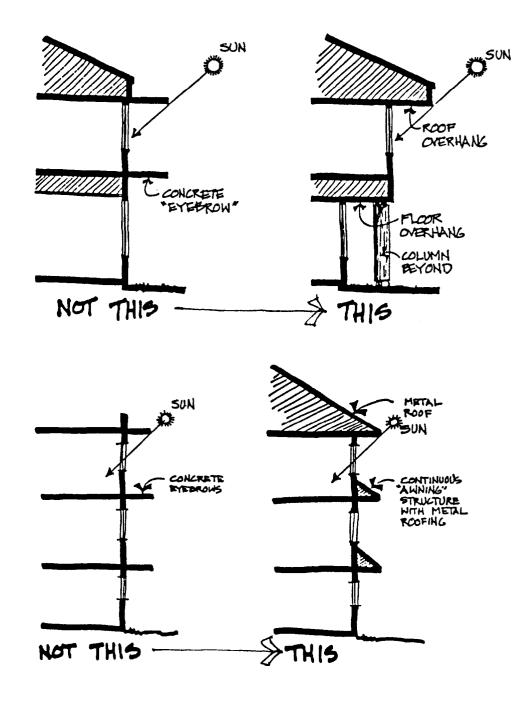
Where deciduous trees are not available for shading, manmade elements such as roof overhangs, floor overhangs, porches, trellises, exterior louvers and other similar elements must be provided to shade exterior walls and glazed areas. Flat concrete "eyebrow" projections and aluminum or fabric awnings or canopies must be avoided.



1.4.1 ADM, CF, MS, HSG, IND



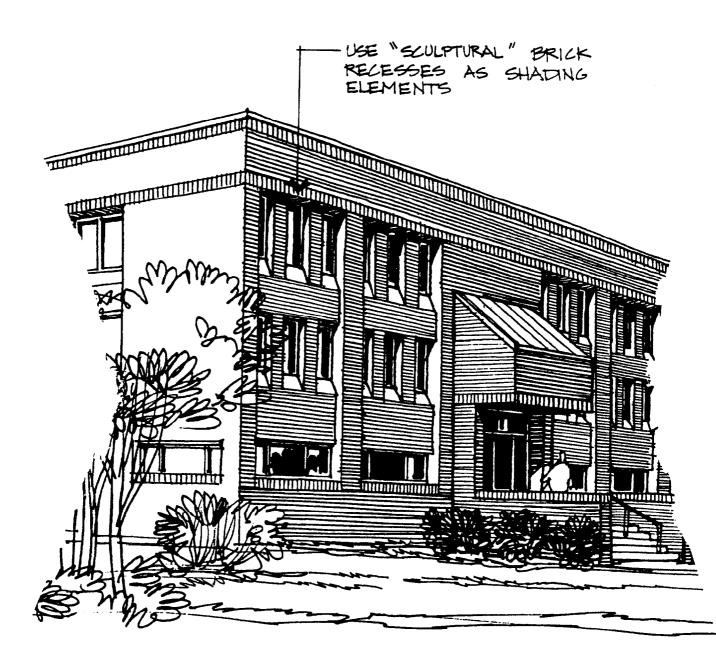
SOLAR GAIN & SHADING



1.4.1 **ADM,** CF, MS, HSG, IND

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SOLAR GAIN & SHADING



| . 4 . | **ADM, CF,** MS, HSG, **IND** 

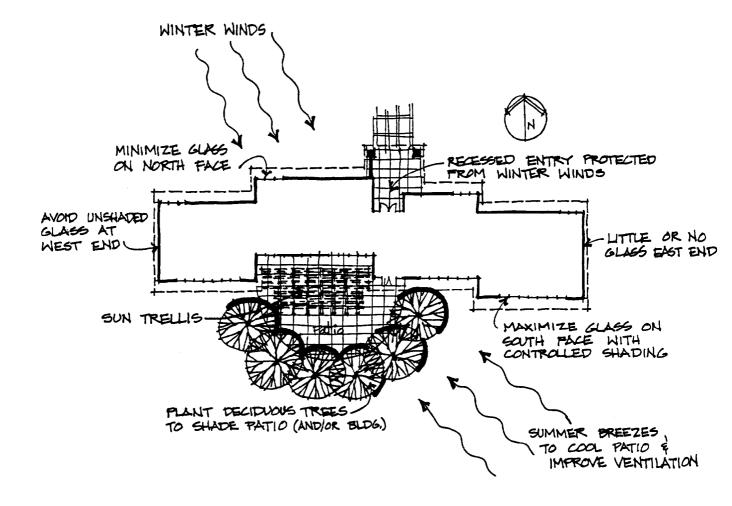
AR LA CE ME SE EE

**CLIMATIC CONDITIONS** 

SHEET 5/7

#### ORIENTATION

Outdoor spaces, doors and operable windows (where used) shall be oriented to avoid winter winds and take advantage of summer breezes. Avoid large glazed areas facing west or southwest unless shaded by deciduous trees, very wide overhangs, exterior louvers or some similar shading device. Orient the long building dimension east and west where possible and use controlled overhangs or other shading devices to let in winter sun while rejecting summer sun.

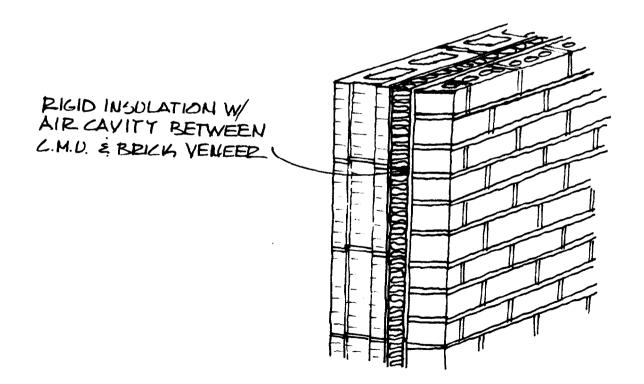


ADM, CF, MS, HSG, IND

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CLIMATION	C CONDI	<b>TIONS</b>		SH	IFFT (	6/7

#### THERMAL MASS

Use massive construction materials such as brick along with continuous exterior insulation for the most effective time-lag heating, flattening day-to-night temperature swings.



**7.4.7 ADM,** CF, MS, HSG, IND

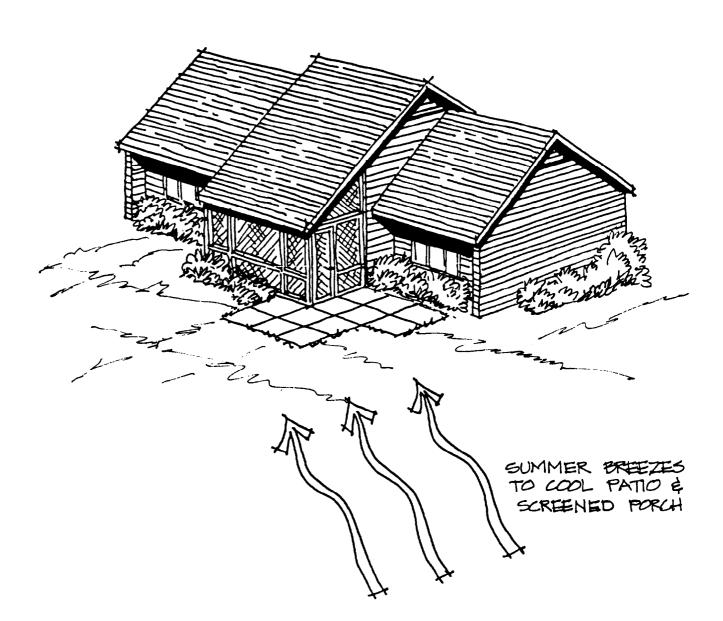
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### **CLIMATIC CONDITIONS**

**SHEET 7/7** 

#### OUTDOOR LIVING AREAS

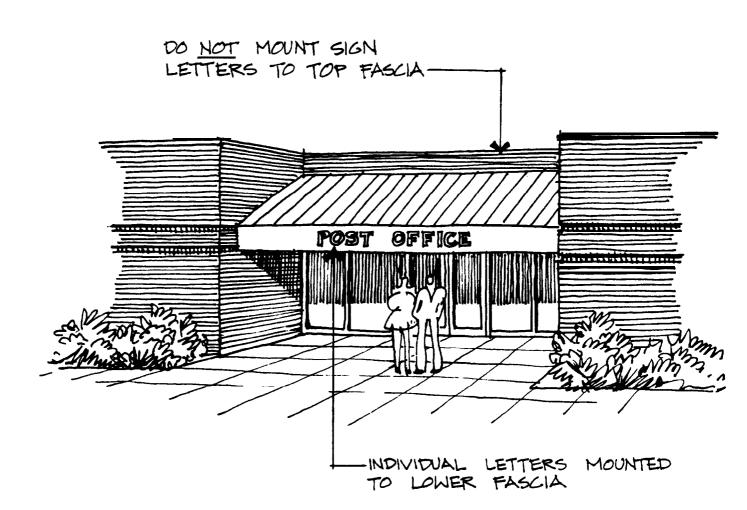
Provide outdoor covered living areas such as porches, screened porches or decks/patios with trellises over, to insure a shady and cool living area. Such spaces shall be oriented to take advantage of summer breezes.



7.5.7 ADM, CF, MS, HSG, IND

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In general, building identification should be accomplish through a series of coordinated, well designed signs located in landscape areas. Signs mounted to buildings should typically be avoided. For certain high usage Administrative or Community Facility buildings, it may be appropriate to usebuilding mounted signage, if done as indicatedherein. Ideally, such signage should add architectural interest and should also help identify main building entries. Signs for Retail buildings must be coordinated with AAFES standards.

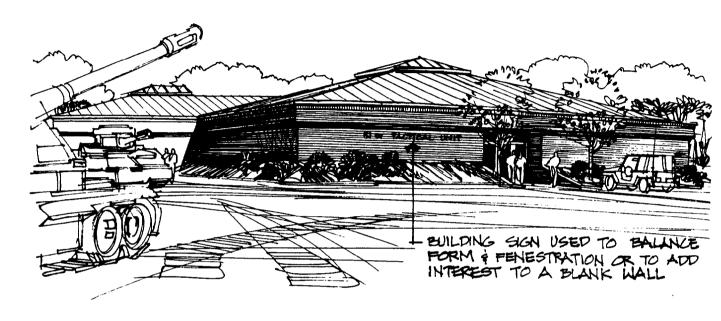


1.5.1 ADM, CF, MS, HSG, IND

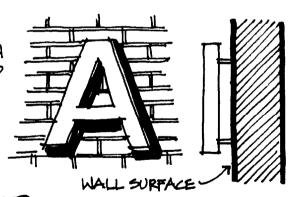
AR LA CE ME SE EE

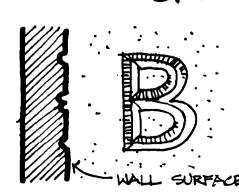
**BUILDING SIGNAGE** 

**SHEET 2/2** 



Sign Letters SHALL BE PIN-MOUNTED ALUMINUM WITH BAKED-ENAMEL OR ANODIZED FINISH. WHERE NICHTTIME IDENTIFICATION IS IMPORTANT, LETTERS MAY BE BACKLIT. LETTERING STYLE SHALL BE HELVETICA MEDIUM OR HELVETICA REGULAR.



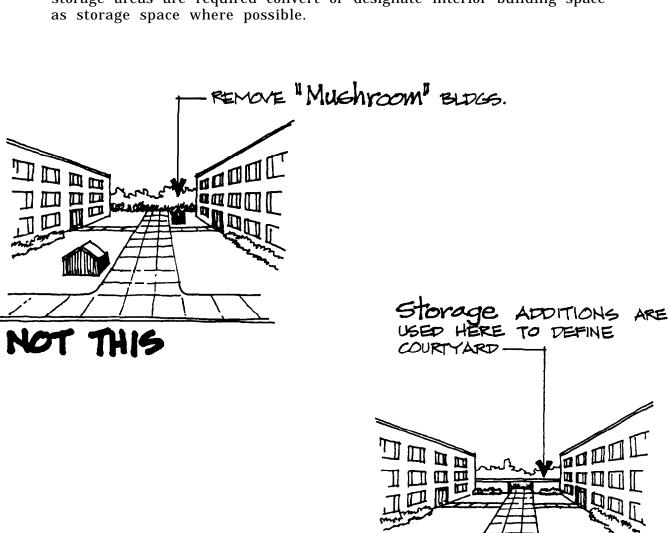


Sign Letters MAY BE CAST INTO PERMANENT MATERIALS SIXH AS CONCRETE.

1.6.1 **ADM, CF, MS, HSG, IND** 

AR	LA	CE	ME	SE	EE
<b>OUTBUIL</b>	DINGS			SH	HEET 1/3

"Mushroom" buildings, i .e. free standing/small storage buildings, must be strictly avoided thorughout the Post. Existing buildings of this type should be removed as soon as possible. **Where** additional small storage areas are required convert or designate interior building space as storage space where possible.

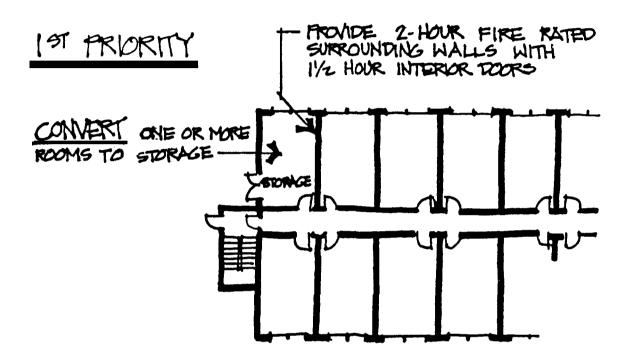


1.6.1 ADM, CF, MS, HSG, IND

OUTBUILDINGS

CE ME SE EE

SHEET 2/3





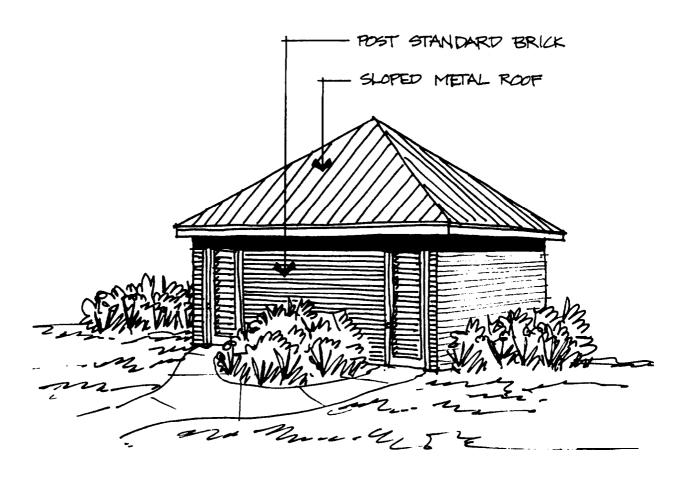
### 2nd PRIORITY

STORAGE ADDITIONS
TO EXISTING EVILLDINGS
MUST UTILIZE SIMILAR
MATERIALS, COLORS,
FORMS, ETC.

1.6.1 **ADM.** CF. MS. **HSG. IND** 

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OUTRUII	DINGS			SH	HEFT 3/3

WHEN SUCH FREE STANDING STORAGE BUILDINGS ARE UNAVOIDABLE, THEY MUST BE OF HIGH QUALITY DESIGN, UTILIZING THE SAME ARCHITECTURAL CHARACTER AND MATERIALS AS OTHER BUILDINGS IN THEIR LAND-USE ZONE.



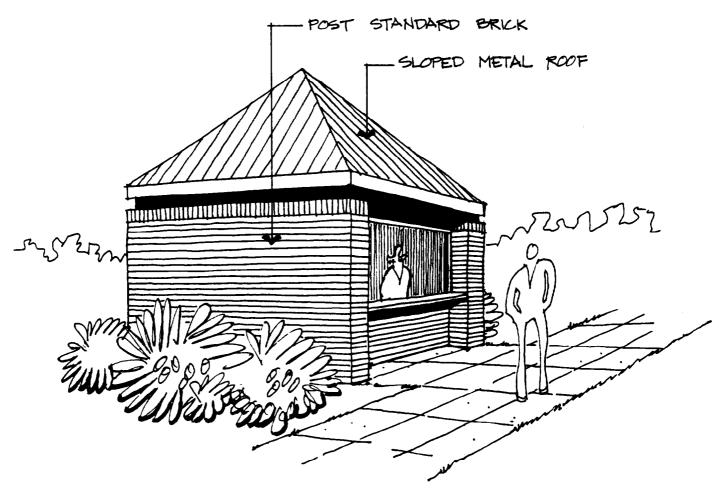
### 3rd PRIORITY

FREE STANDING STORAGE BUILDINGS

1.6.2

AR	LA	CE	ME	SE	EE
<b>OUTBUIL</b>	DINGS			S	HEET $1/2$

Outbuildings (small buildings of limited and usually utilitarian function) will generally be avoided. However, certain outbuildings are required for functional reasons, such as concessions stands which must be convenient to the open space they serve. When such outbuildings must be used they will be of high quality design and details. Their architectural character shall be as dictated for other buildings of their land-use zone.

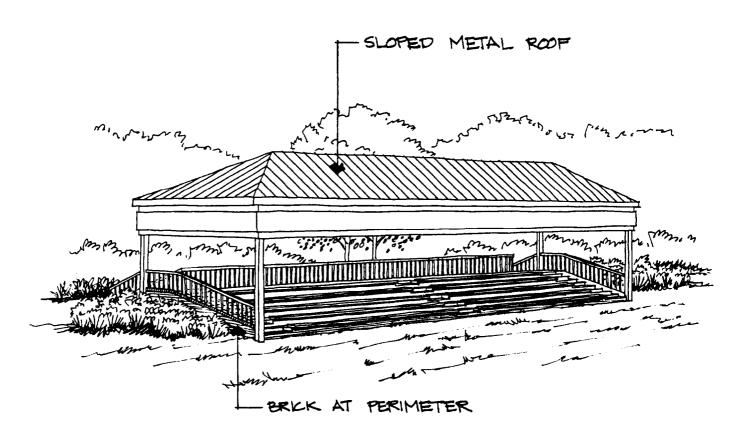


CONCESSION STAND

1.6.2 os

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OHTRIIII	DINGS			Q L	JEET 2/2

Some structures which can loosely be defined as "outbuildings", such as reviewing stands, are not actually buildings, but due to their mass and form, they make a strong visual statement and thus will be given considerable design attention. The term "architectural character" may not always be applicable. Character may be influenced by practical or structural demands but a high quality appearance must be achieved. Materials and colors must be consistent with Post standards.



reviewing stand

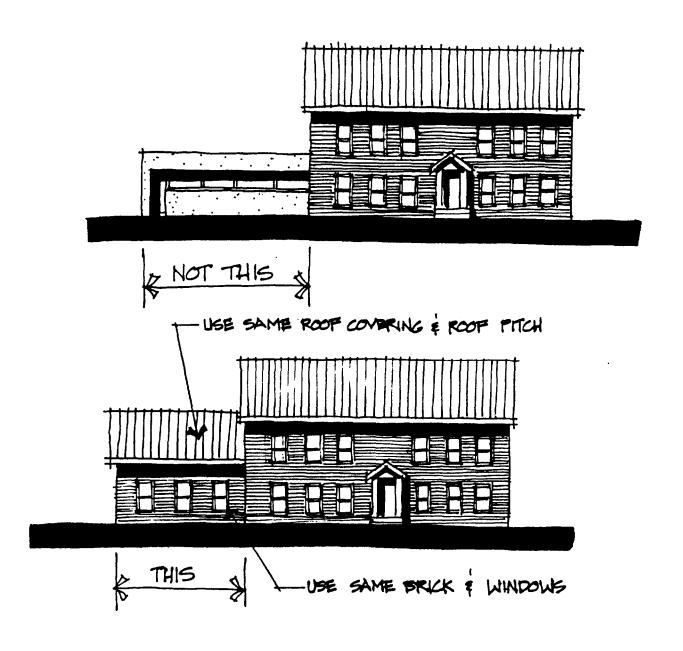
| . / . | **ADM, CF,** MS, H**SG, IND** 

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### **RENOVATIONS & ADDITIONS**

SHEET 1/5

Architectural Character, form and style shall be especially compatible betweenadditions and the structures they are attached to. Basic rhythm, scale, roof form, massing, texture, materials, color, etc. must be maintained. It is not necessary for the addition to imitate exactly the motif established on the existing building, especially when the existing building is of relatively low design quality. In these cases, the opportunity exists for a general renovation of the existing structure. Such renovations are to be considered in all such cases.



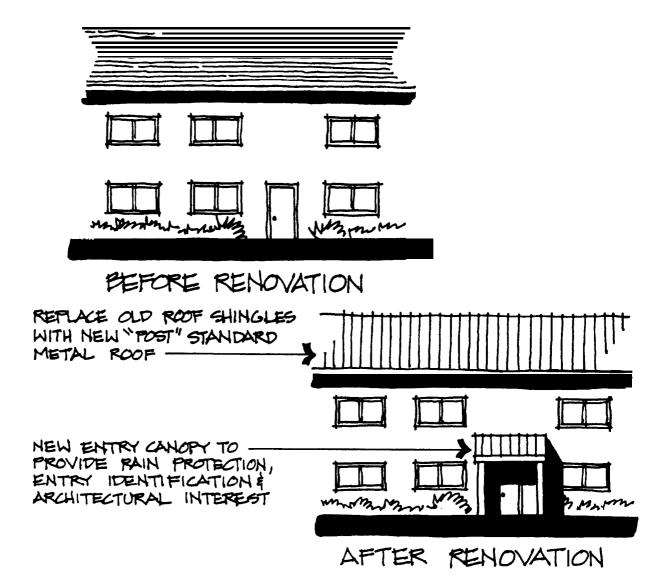
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### **RENOVATIONS & ADDITIONS**

**SHEET 2/5** 

Renovations provide the opportunity to change materials which are no longer serviceable and add form enriching elements which would result in a building more consistent with the character established for the Post. Other objectives described for new buildings, such as covered entry elements, climate responsive elements, etc. are to be incorporated.



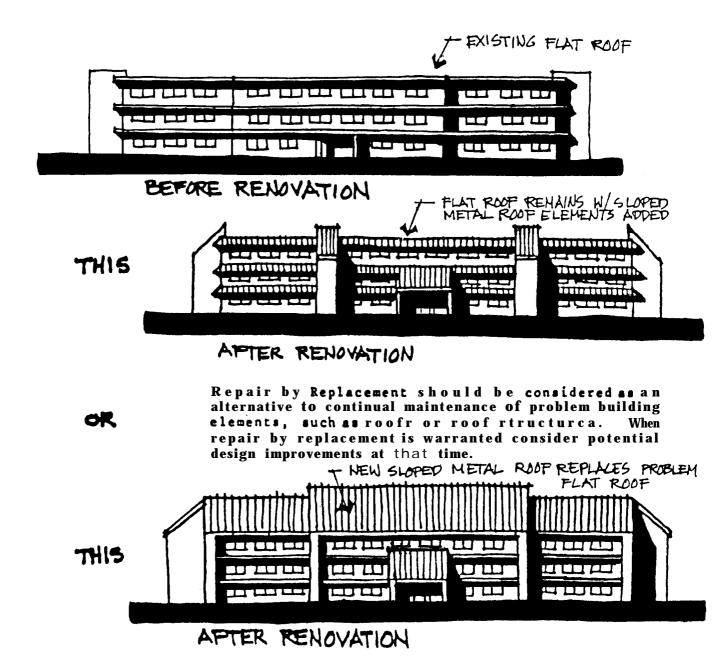
1.7.1 **ADM,** CF, MS, HSG, IND

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### **RENOVATIONS & ADDITIONS**

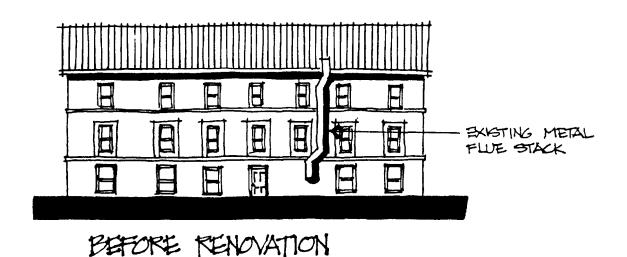
SHEET 3/5

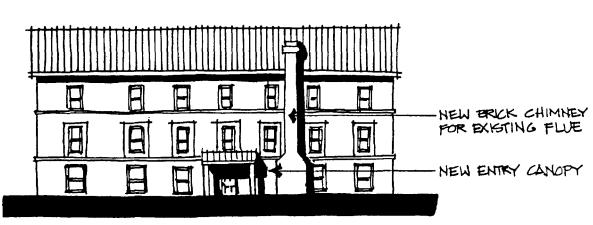
Where existing buildings to be renovated have flat roofs which are not causing major maintenance problems, add sloped roof elements in order to bring the building in character with the Post standard. Such elements work particularly well at stairs and at window canopies (for sun shading). Other sloped roof elements can be entry canopies, added interior and/or exterior storage space or other needed interior space.



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RENOVA	TIONS &	ADDITION	NS	S	<b>HEET 4/5</b>

All necessary exterior utility elements are to be removed or screened in a manner that is compatible with the architecture of the building. All other such elements are to be enclosed by a new architectural element.





AFTER RENOVATION

| . / . | ADM, CF, MS, HSG, **IND** 

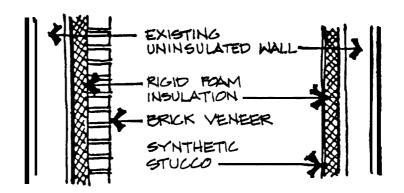


### **RENOVATIONS & ADDITIONS**

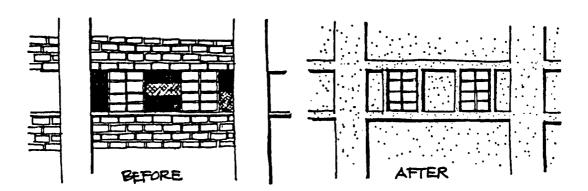
SHEET 5/5

Materials will be discussed in Section 1.3.1, but with additional consideration for exterior wall materials:

1. For existing buildings with year round climate control and poor insulation, consider brick veneer with rigid insulation in the cavity or an exterior insulation and finish system which has rigid insulation as an inherent part of it's assembly.



The synthetic stucco system has the advantage over real stucco in terms of facilitating character enriching details such as accent bands, raised window trim, cornices, etc.



2. For existing buildings requiring little or not year-round climate control and of exposed concrete unit masonry, consider stucco applied directly to the masonry if unpainted and applied over metal lath if the masonry is presently painted.

1.8.1 ADM. CF. MS. IND

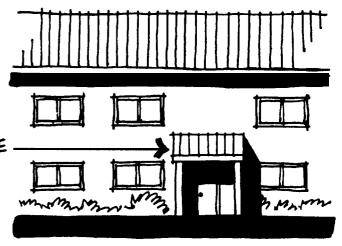
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### **ENTRANCES & ACCESS**

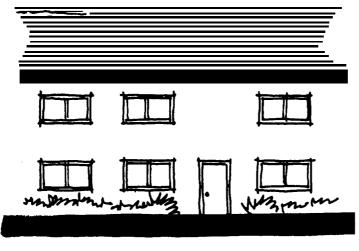
SHEET 1/4

Building entrances should be readily distinguished as the "entrance" on all buildings. The primarily method of distinguishing the entrance is by manipulating the form and mass to provide a three dimensional element, i.e. some form of cover at the entrance door. This maybe done by a projecting roof element or by creating a void under the floor(s) or roof above. In addition to providing recognition, such covers will also provide for rain protection. Not all exterior doors are entrances. Doors to utilitarian spaces or emergency exist doors should be played down in favor of the entrance(s).

ROOF COVER PROVIDES ENTRY RELOGNITION, RAIN PROTECTION AND ADDS INTEREST. IN THIS EXAMPLE, BUILDING AND/OR ENTRANCE IS OF MINOR IMPORTANCE



THIS



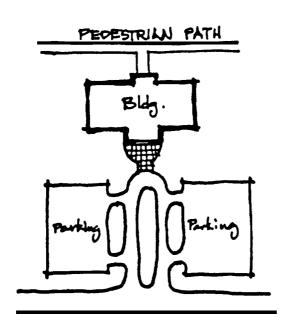
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1.8.1 ADM, CF, MS, IND

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**ENTRANCES & ACCESS** 

**SHEET 2/4** 



LOCATION OF BUILDING ENTRANCE(S) SHOULD BE A CAREFUL BALANCE BETWEEN THE DESIRED SITE PLAN ARRANGEMENT AND THE INTERNAL FUNCTIONAL (FLOOR PLAN) LAYOUT. WHERE A BUILDING IS LOCATED BETWEEN TWO PARKING LOTS OR A PARKING LOT AND A MAJOR PEDESTRIAN WAY, THE BUILDING SHOULD BE PROVIDED WITH TWO (OR MORE) "ENTRANCES". THE FORM AND MASS SHOULD BE ADJUSTED TO SIGNIFY THEIR RELATIVE IMPORTANCE.

MASS & FORM SHOULD REFLECT THE RELATIVE IMPORTANCE OF THE PARTICULAR ENTRANCE TO ITS OWN BUILDING AND TO OTHER BUILDINGS.
CERTAIN ADMINISTRATIVE AND COMMUNITY FACILITY BUILDINGS SHOULD HAVE MORE PROMINENT ENTRANCES THAN OTHER BUILDINGS.

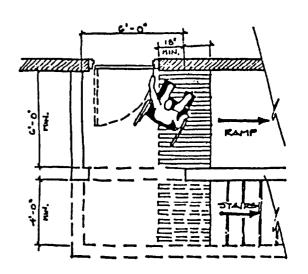


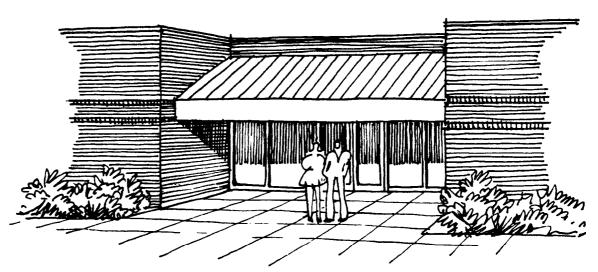
1.8.1 **adm,** cf, ms, ind

**ENTRANCES & ACCESS** 

**SHEET 3/4** 

MAJOR ENTRANCE PER MULTI- FAMILY BUILDING SHALL BE DESIGNED FOR CONVENIENT ACCESS BY THE PHYSICALLY HANDICAPPED IN ACCORDANCE WITH CRITERIA ESTABLISHED BY DOD 4270,1-M.



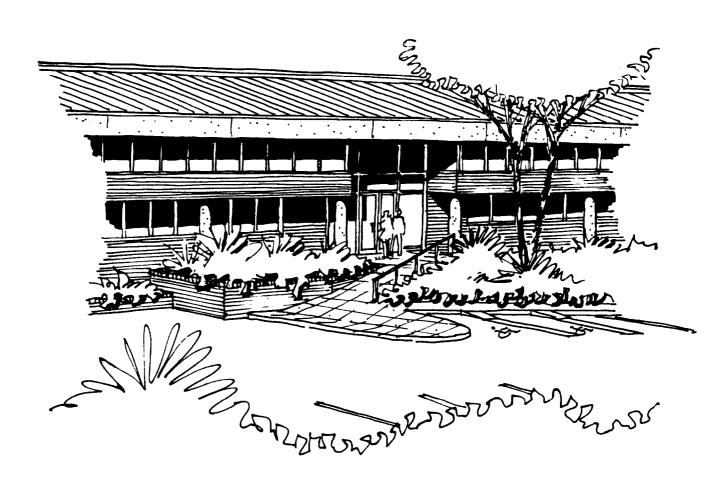


AVOID STEPS. PROVIDE GRADE LEVEL ENTRIES OR RAMPS.

1.8.1 ADM, CF, MS, IND

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RAMPS OF GRAND FORM AND PROPORTION MAY BE USED AS THE ONLY ACCESS TO MAIN BUILDING ENTRANCES. RAMPS DON'T HAVE TO BE OFF TO THE SIDE OF STEPS AS THEY SO PREQUENTLY ARE, NOR ARE THEY JUST FOR THE HANDICAPPED.



1.8.2

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### **ENTRANCES&ACCESS**

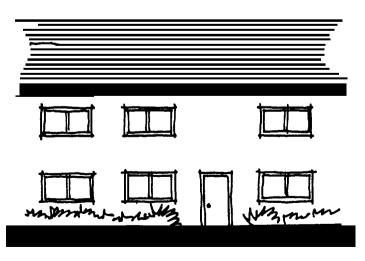
SHEET 1/3

Building entrances should be readily distinguished as the "entrance" on all buildings. The primarily method of distinguishing the entrance is by manipulating the form and mass to provide a three dimensional element, i.e. some form of cover at the entrance door. This maybe done by a projecting roof element or by creating a void under the floor(s) or roof above. In addition to providing recognition, such covers will also provide for rain protection. Not all exterior doors are entrances. Doors to utilitarian spaces or emergency exist doors should be played down in favor of the entrance(s).

ROOF COVER PROVIDES ENTRY RELOGNITION, RAIN PROTECTION AND ADDS INTEREST. IN THIS EXAMPLE, BUILDING AND/OR ENTRANCE IS OF MINOR IMPORTANCE



THIS



NOT THIS

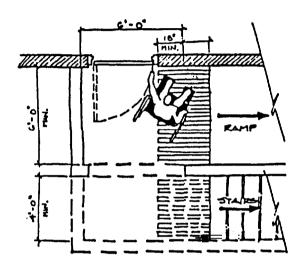
1.8.2 HSG

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**ENTRANCES&ACCESS** 

**SHEET 2/3** 

MAJOR ENTRANCE PER MULTI- FAMILY BUILDING SHALL BE DESIGNED FOR CONVENIENT ACCESS BY THE PHYSICALLY HANDICAPPED IN ACCORDANCE WITH CRITERIA ESTABLISHED BY DOD 4270,1-M.

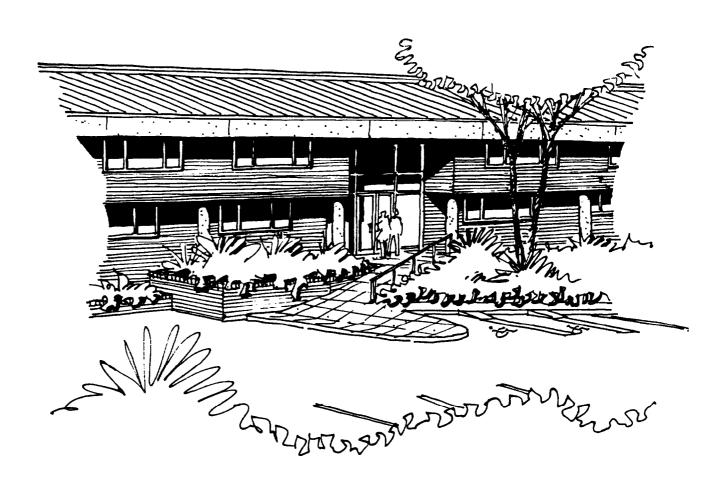




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RAMPS OF GRAND FORM AND PROPORTION MAY BE USED AS THE ONLY ACCESS TO MAIN BUILDING ENTRANCES. RAMPS DON'T HAVE TO BE OFF TO THE SIDE OF STEPS AS THEY SO PREQUENTLY ARE, NOR ARE THEY JUST FOR THE HANDICAPPED.



**1.9.1** ADM, CF, MS

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**COVERED WALKWAYS** 

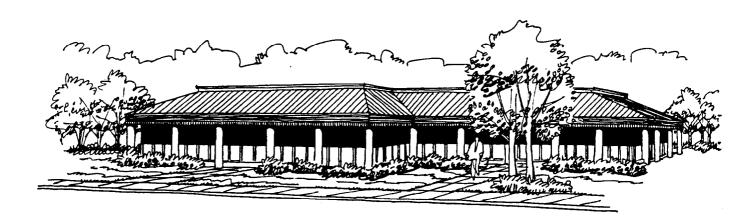
SHEET 1/2

#### **GENERAL**

Covered walkways shall be provided whenever there is significant pedestrian traffic between nearby exterior entries. A good example of this is shopping facilities. Another example is related communities facilities such as health services. Other possibilities include many different administrative, community facility or mission support buildings where people must frequently walk from building to building. In such instances, not only can covered walkways be functional in providing rain and sun protection for the pedestrians, but they can act as a unifying design element.

#### **NEW BUILDINGS**

First priority for new buildings with covered walkways is to locate them under the main roof or the floor above in the case of multi-story buildings. Avoid designs which look as if the walkway was added on.



1.9.1 ADM, CF, MS

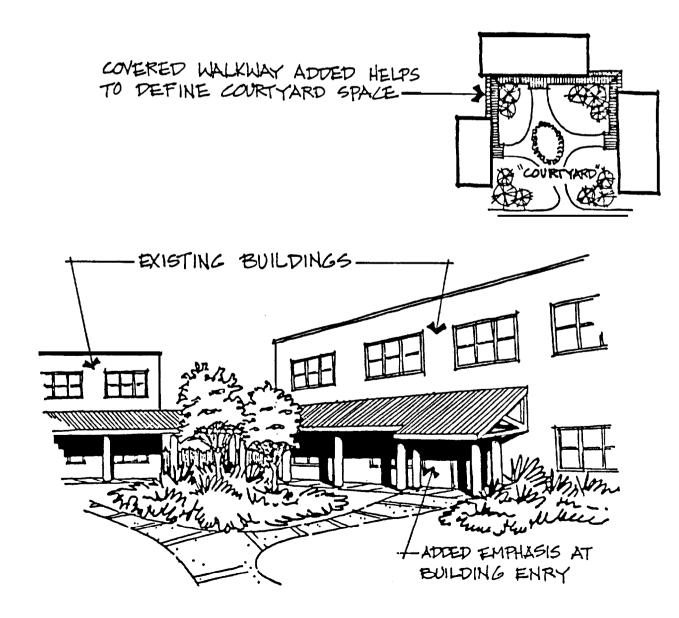
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### **COVERED WALKWAYS**

**SHEET 2/2** 

EXISTING BUILDINGS

For existing buildings, walkways will have to be "added on", but must be done in a manner consistent with the architectural character established for the particular land-use zone. For example, where existing buildings have flat roofs, add sloped metal walkway roofs to relate the buildings to the new desired image. At the same time, such walkway roofs can add interest to typically plain buildings, give a more human scale, and provide solar shading for at least some of the glazing.



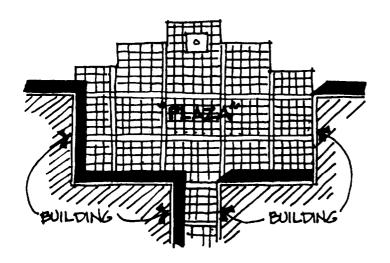
1.10.1 **ADM,** CF, MS, HSG

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**PLAZAS & COURTYARDS** 

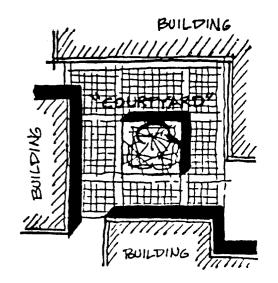
SHEET 1/3

Provide plazas or courtyards to form a grand entrance to important buildings or as an outdoor "refuge" between buildings or within a single building. Buildings surrounding a plaza or courtyard shall interrelate from a function point of view.



PLAZAS ARE OPEN ON ONE OR MORE SIDES, IE. NOT "CONTAINED" BY BUILDINGS OR LANDSCAPING. SUCH PLAZAS ARE PARTICULARLY SUITABLE AS ENTRY SPACES AT VERY IMPORTANT BUILDINGS.

COURTYARDS ARE SPACES ENCLOSED BY BUILDINGS AND LANDSCAPING ON FOUR SIDES, IE. A "CONTAINED SPACE".
THEY MAY BE USED AS A SPACE FROM WHICH TO ENTER RELATED BUILDINGS OR THEY MAY BE A QUIET REFUGE WITHIN A BUILDING OR "BEHIND" A GROUP OF BUILDINGS.

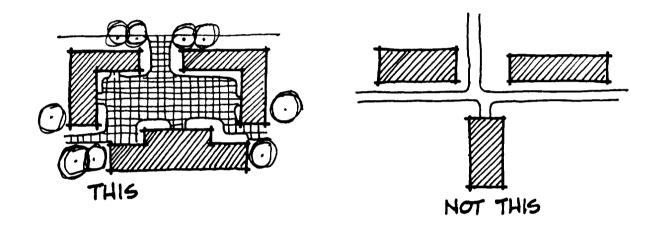


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### **PLAZAS & COURTYARDS**

SHEET 2/3

Spatial Enclosure should be definite and distinct, whether formed by separate buildings, wings of a building, landscape elements, or a combination. There should be definite sense of entrance to the courtyard.



MATERIALS SHOULD EMPHASIZE
BRICK, AS PAVEMENT OR PAVEMENT
ACCENTS, SITE RETAINING OR
PLANTER WALLS, FIRST PRIORITY
OF PAVING MATERIALS IS ALL
BRICK. SECOND PRIORITY IS EXPOSED
AGGREGATE (PEA GRAVEL) CONCRETE
WITH BRICK ACCENT BANDS. THIRD
PRIORITY IS ROCK SALT TEXTURED
CONCRETE WITH BRICK ACCENT BANDS.
LAST PRIORITY IS BROOM FINISHED
CONCRETE. AVOID LARGE EXPANSES
OF CONCRETE PAVING. PRIORITY
SHALL BE DETERMINED BY THE
LEVEL OF DESIGN FOR THE PROJECT.

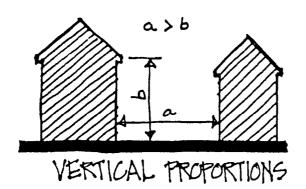
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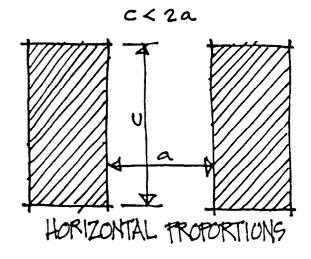
### **PLAZAS & COURTYARDS**

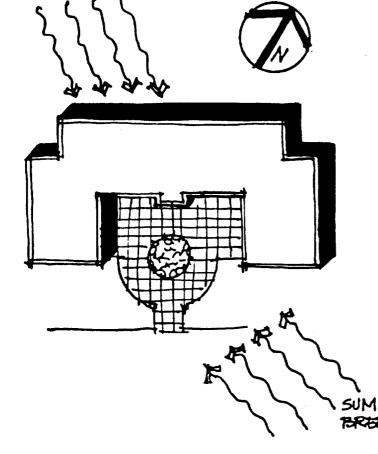
SHEET 3/3

Proportions should be controlled such that the width of courtyards should be greater than the height of adjacent buildings in either direction. Also, the length of the courtyard should be no greater than twice its width.



WINTER WINDS





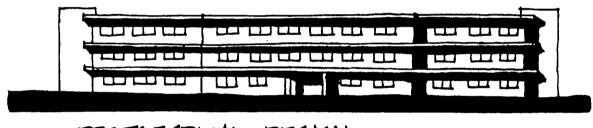
ORIENTATION SHOULD INSURE
THAT COURTYARDS TO NOT
REMAIN IN SHADOW THROUGHOUT
THE DAY. AVOID PREVAILING
WINTER WINDS AND ALLOW FOR
SUMMER ERFEZES WHERE 1095/18LE.

1.11.1 ADM, CF, MS, HSG, IND

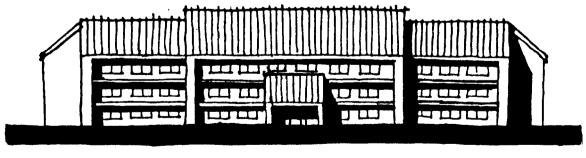
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### **ADAPTIVE DESIGN**

"Adaptive design" is used here to mean the "adaptive design" of prototypical plans furnished to the designer by the Department of the Army or others. When the designer is required to adapt a prototypical design for this Post, he must follow all recommendations of the "Design Guide", as if it were a totally new design. Usually this will mean only minor changes in floor plan design, but significant changes to the exterior skin.



### PROTOTYPICAL DESIGN



ADAPTED DESIGN

1.12.1 ADM, CF, MS, IND

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# MECHANICAL EQUIPMENT & BUILDING SERVICES

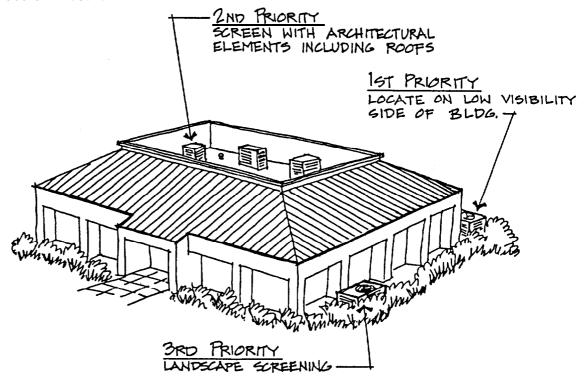
**SHEET 1/2** 

#### GENERAL INFORMATION

This section covers the treatment of visually undesirable elements which are functionally necessary. These elements include, dumpsters, pad mounted transformers, HVAC equipment, exhaust fans, plumbing vent stacks, etc. Since such building elements are unavoidable, they will necessarily be visible from somewhere. The point of the section is that such undesirable elements must not be visible to casual building users or passers-by. For new buildings, all such items must be dealt with in the initial design. After the fact "fixes are not acceptable. For existing buildings, see Section 1.7.1 - "Renovations. & Additions."

#### LOCATION & SCREENING

The first priority of dealing with mechanical equipment and other similar elements, is to simply locate them on the low visibility side of the building so that the building itself screens them from normal view. The second priority is to effectively screen them with building elements such as roofs, walls or building projections. Do not locate high maintenance items such as packaged rooftop A/C units on the roof. Low maintenance items such as condensers may be located in roof **recesses** only if a permanently mounted ladder and scuttle is provided for access. The third priority is landscape screening as discussed in Section 4.6.1.



1.12.1 ADM, CF. MS. IND

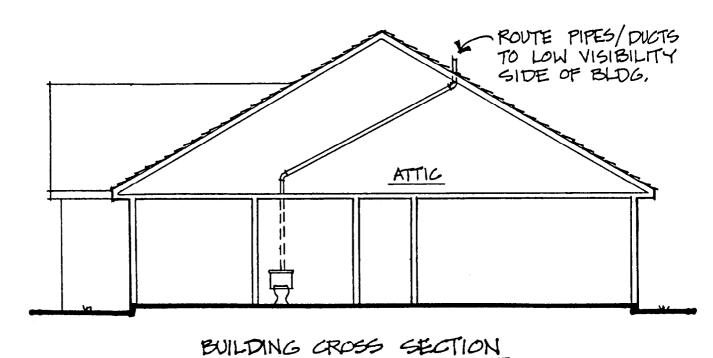
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MECHANICAL EQUIPMENT & BUILDING SERVICES

**SHEET 2/2** 

#### **ROOF PENETRATIONS**

Elements such as plumbing vents thru roof and exhaust vents must be routed so the **roof** penetration is on the low visibility side of the building.



1.12.2 HSG

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# MECHANICAL EQUIPMENT & BUILDING SERVICES

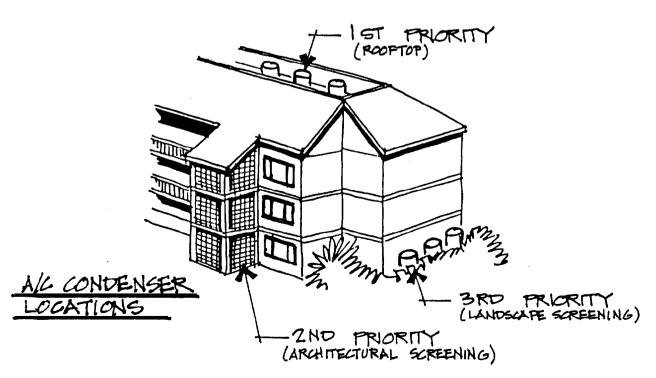
SHEET 1/2

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#### LOCATION & SCREENING

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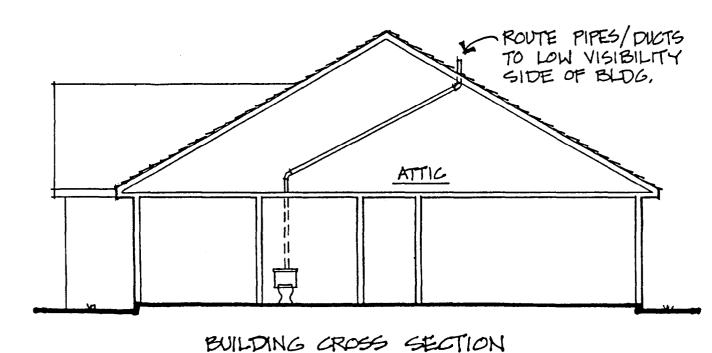
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MECHANICAL EQUIPMENT & BUILDING SERVICES

SHEET 2/2

ROOF PENETRATIONS

Element8 such a8 plumbing vent8 thru roof and exhaust vents must be routed so the roof penetration is on the low visibility side of the building.



ADM, CF, MS, HSG, INC

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### COMPATIBILITY

SHEET 1/4

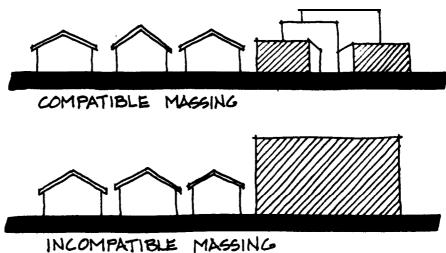
#### GENERAL INFORMATION

In order to achieve uniformity in design throughout the Post, buildings in close proximity to one another will be compatible in design. It is not intended for all buildings to look the same but they must blend with each other. This is to be accomplished in several ways, but in general, it requires that the buildings share similar design elements such as windows, roof forms and exterior materials. The basic rule of thumb is that all building designs should be outstanding but none should "stand-out".

Where the adjacent building is a temporary building, there will be no attempt to achieve compatibility. Where the adjacent structure is a permanent building of low design quality, the new building design shall be somewhat sympathetic to the adjacent, but complete compatibility will not be achieved. In the future, these incompatible buildings should be demolished or renovated to be consistent with the intended image for the Post.

#### MASSING

A large facility can be made to better relate to existing smaller facilities by dividing its mass into smaller components to create a building elevation that is more compatible or complementary to the adjacent structures in terms This is to be accomplished by manipulating the of its size and proportions. configuration of the floor plan and/or building height to break down the mass of the building into smaller elements.

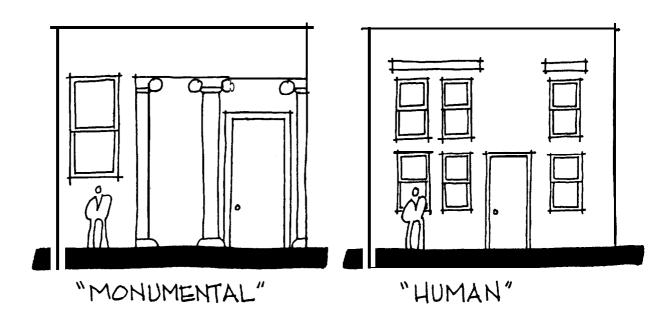


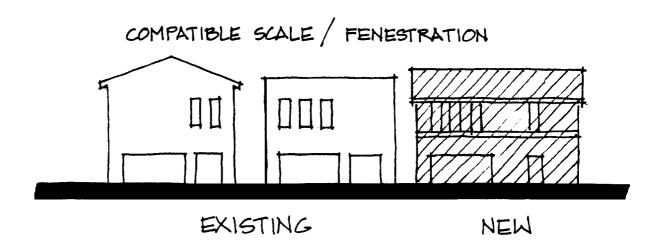
1.13.1 ADM, CF, MS, HSG, IND

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COMPA	TIBILITY			SH	IFFT 2/4

#### **SCALE**

Building designs shall be proportioned and detailed to be compatible in scale. Since scale is greatly conveyed by the building fenestration, this will also mean that the size and proportions of windows will be similar.



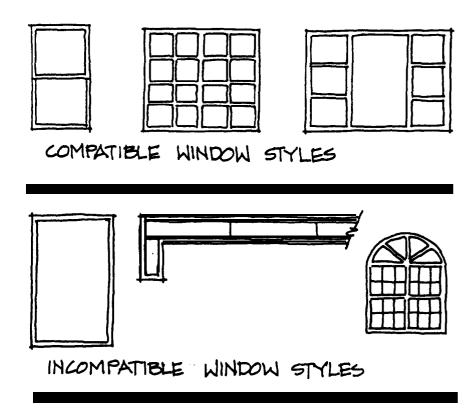


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<b>COMPAT</b>	IBILITY			SH	IEET 3/4

#### WINDOW STYLES

Window styles must be compatible for adjacent buildings. Although a certain amount of variety is encouraged, windows should not range from large expanses of glass to finely divided small windows, for example. However, windows under deep overhangs are not as critical, in terms of compatibility, as windows on the wall surface, since shadows will diminish their prominence as a design element.



1 . 1 3 . 1 **ADM,** CF, MS, **HSG,** IND

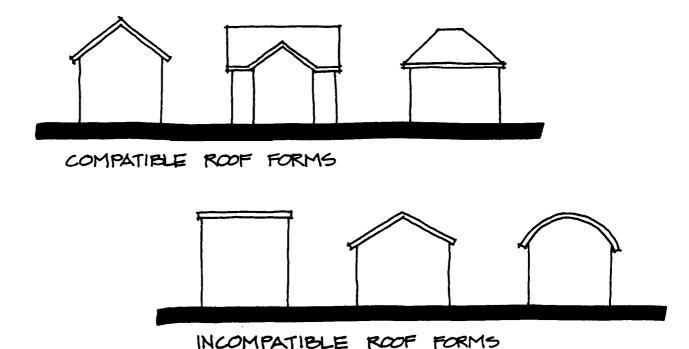
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**COMPATIBILITY** 

SHEET 4/4

**FORMS** 

Ideally, building forms, particularly roof forms, should be compatible between adjacent buildings. This level of compatibility will be difficult to achieve on this Post since many existing buildings have flat roofs and yet the new intended image includes sloped metal roofs. To compensate, new buildings with sloped roofs adjacent to existing buildings with flat roofs should be especially compatible in terms of other design elements such as scale, massing, windows and/or exterior materials. Where it is feasible, adjacent buildings should have similar roof forms. This can include several different types of pitched roofs: hip, gable and shed.

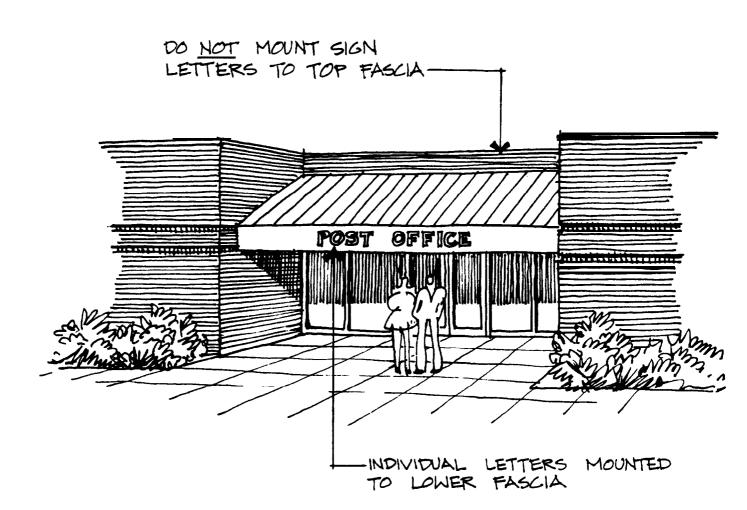


# 1. Buildings & Courtyards

7.5.7 ADM, CF, MS, HSG, IND

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In general, building identification should be accomplish through a series of coordinated, well designed signs located in landscape areas. Signs mounted to buildings should typically be avoided. For certain high usage Administrative or Community Facility buildings, it may be appropriate to usebuilding mounted signage, if done as indicatedherein. Ideally, such signage should add architectural interest and should also help identify main building entries. Signs for Retail buildings must be coordinated with AAFES standards.



# **DESIGN ELEMENTS MATRIX**

2. Roads & Paths

General Information Parkway/Highway Primary/4 Lane

Secondary/2 Lane Tertiary/2 Lane Cul-De-Sac

Rural Road Patrol Road

Sidewalks

Ramps & Steps

Bike Path System

Bank Stabilization

3.

7.

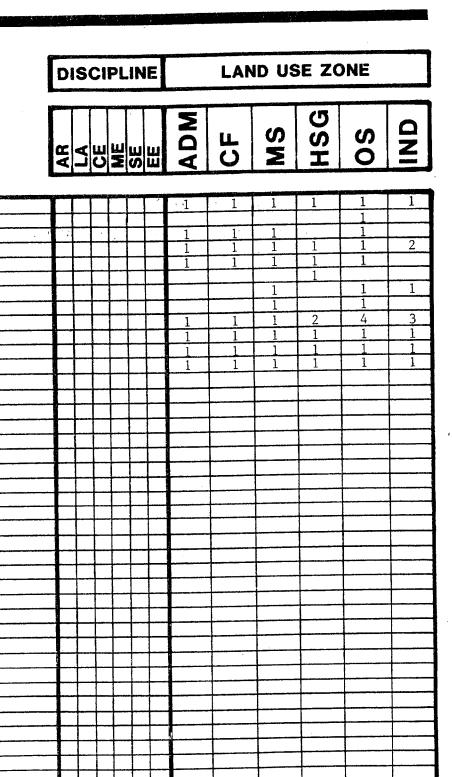
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2.1.1 ADM, CF, MS, HSG, OS, IND

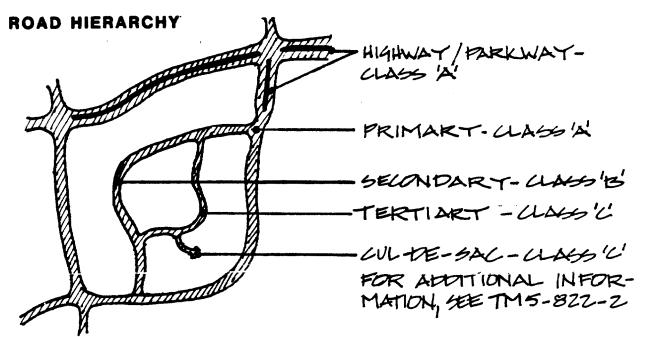
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#### **GENERAL INFORMATION**

SHEET 1/9

Roads and paths will be one of the most costly elements to develop on Post. Both vehicular and pedestrian circulation systems are a must and should be efficient and sensitive to the topography of the Post. The circulation system should functionally and visually reflect a logical hierarchy of traffic circulation. Circulation systems especially streets are one of the most powerful form generators in the landscape.



PARKWATS & HIGHWATS ARE DESIGNED FOR TRAPPIC ABOVE 40 M.P.H. THESE ROADS ARE 4 LANE AND ARE TO BE DE-94NED WITH A VEGETATED MEDIAN. NO ON STREET PARKING ALLOWED. (CLASS &, 12' LANES, MEDIAN VARIES) PRIMART ROADS ARE MEDIUM TO HIGH SPEED 4-LANE ROADS WHICH MAT BE DIVIDED OR UNDIVIDED. NO ON STREET PARKING ALLOWED. (CLASS &, 12' LANES, MEDIAN VARIES)

2.1.1 ADM, CF, MS, HSG, OS, IND

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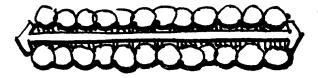
#### GENERAL INFORMATION

SHEET 2/9

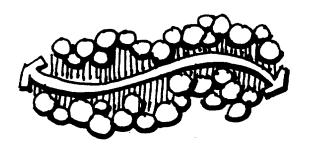
SECONDARY ROADS CONNECT TERTIARY ROADS TO PRIMARY ROADS. THESE ARE DEGIGNED FOR SPEEDS UNDER 40 M.P.H. NO ON STREET PARKING ALLOWED. (CLASS'ES, 12'LANES)

TERTIART & CULTE GACS ARE ROADS WHICH HANDLE LOCAL TRAFFIC, AT LOW SPEEDS. ON STREET PARALLEL PARKLING IS ALLOWED. (CLASS 'C', II'LANES)

Circulation systems are governed by two basic criteria-access and topography. The systems should be designed to go where people want to go and they should fit into the landscape. The systems (roads, walks, and bike paths) should be designed to minimize cut and fill. All cut and fill slopes and drainage channels should be rounded to blend into the natural landform. They should be aligned to protect existing vegetation; wherever vegetation or ground is disturbed optimum conditions for revegetation should be provided-see section 2.12.1.



THIS ROAD, WALL, OR PATH HAS A STRAIGHT ALIGNMENT WITH UNIFORM CLEARING AND IS MONOTONOUS.



THIS ROAD, WALK, OR PATH IS ALIGNED WITH THE TOPO. THE UNDULATED CLEARING AND FEATHERED VEGETATION CREATES AN INTERESTING FATH OR ROAD.

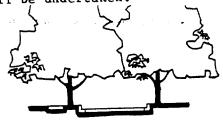
2.1.1 ADM, CF, MS, HSG, OS, IND

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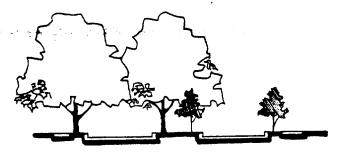
#### **GENERAL INFORMATION**

SHEET 3/9

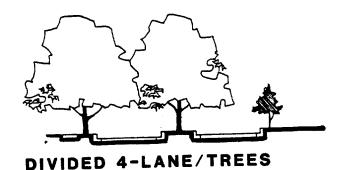
When expanding streets it is not always necessary to destroy existing trees. Plan for future growth. The necessary median width will be determined by the size of the existing trees. The designer will consult an arborist before any major construction. The primary concern will be to prevent damage and/or death to existing trees and to maintain their health and vigor. Any measure the arborist advises will be undertaken.



#### EXISTING STREET/TREES



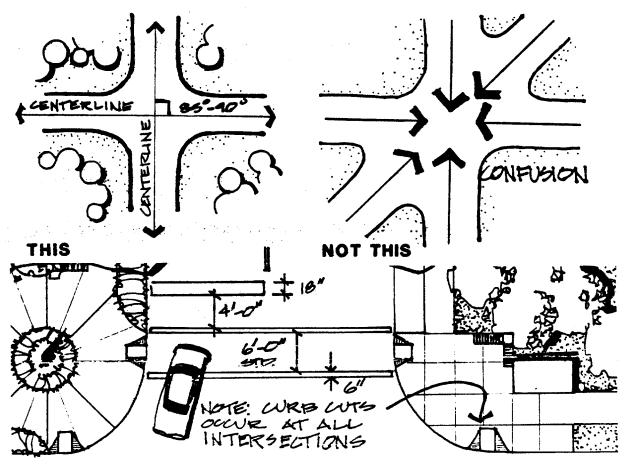
EXPANDED DIVIDED STREET/DOUBLE ROW OF TREES



2.1.1 ADM, CF, MS, HSG, OS, IND

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GENERAL	INFORM	ATION		SH	FFT 4/G

INTERSECTIONS FOR ALL CIRCULATION SYSTEMS ON POST ARE TO BE AS FOLLOWS —

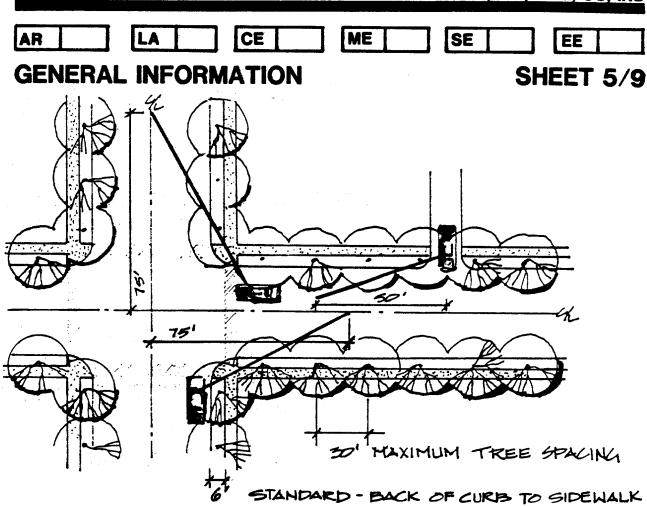


INTERSECTIONS ARE TO BE MARKED WITH CROSSWALKS. THE STRIPES ARE REPLECTIVE WHITE AND A STANDARD SINCHES WIDE. THET MAT BE PAINTED OR TAPED. ALL ROADS WITH MARKED LANES WILL HAVE THE ADDITIONAL STOP STRIPE FOR ON COMING TRAFFIC, OF SAME MATERIAL AS CROSSWALK. THE STOP STRIPE WILL BE 4 FEET PROM CROSSWALK AND BE 18 INCHES WIDE. CROSSWALKS ARE TO BE MARKED CALLT IN CONJUNCTION WITH ESTABLISHED SIDEWALKS.

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2.1.1 ADM, CF, MS, HSG, OS, IND



Field of vision at intersections will not be blocked by tree trunks. Street trees will be arranged to allow the driver at least a 75 foot view in both directions. At exits, trees along the street should be located far enough from the driveway to allow a driver to see at least 50' in both directions before entering the street.

All site furnishings, signs, utility poles, fire hydrants and light poles are to be located a minimum of 2 feet from the curb or edge of paving in any area where the design speed of the road is less than 40 m.p.h. and out of sight triangle.

On roads with a design speed greater than 41 m.p.h., all site furnishings, fire hydrants, light poles shall be located a minimum of 12' from back of curb or edge of pavement. No utility or overhead wiring is permitted within 100 foot of the edge of pavement.

ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE GENERAL INFORMATION SHEET 6/9

THIS NOT THIS
NEW WALKS ARETO
HAVE A & FOOT
MINIMUM RADIUS

WALKWAY INTERSECTIONS

ARE TO BE CURVED - THIS

MAT EUMINATE THE NEED

FOR LANDSCAPED CORNERS

IF GRASS CAN BE

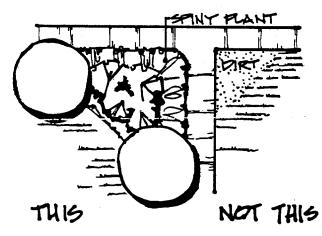
ESTABLISHED & MAINTAINED.

WHERE SIDEWALKS ARE

ADAPTED A 45° ANGLE WITH

AN 8' FOOT SIDE MAY BE

ADDED AT THE INTERSECTION.



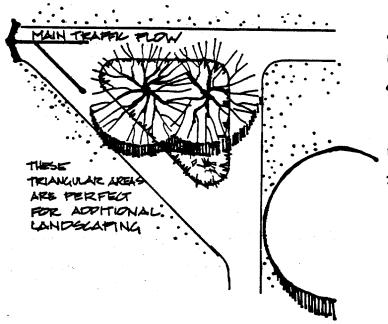
IN AREAS WHERE ARASS CAN-NOT BE ESTABLISHED BELAUSE OF FOOT TRAPFIC - PLANTINGS ESPECIALLY OF SPINY OR THORNY PLANTS MAT ENCOURAGE PEOPLE TO REMAIN ON THE WALK.

2.1.1 ADM, CF, MS, HSG, OS, IND

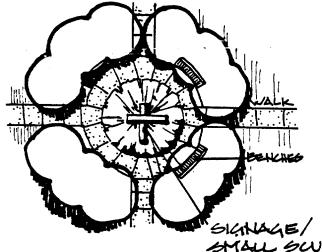
AR LA CE ME SE EE

**GENERAL INFORMATION** 

SHEET 7/9



ON PRIMARY OR HIGH USE WALKS, A DIAGONAL CONNECTOR FOR USERS BEFORE THE INTERSECTION IS REACHED WILL HELP MITIGATE UGLY INTER-SECTIONS.



PROVIDE VIBUAL
INTEREST ALONG WALKS
AND AT FOCAL POINTS
THROUGH THE USE OF
LANDSCAPE MATERIAL.

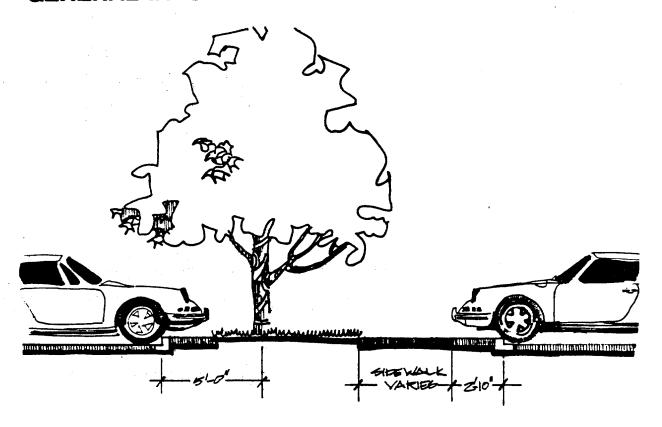
SIGNAGE/ SMALL SCULPTURE OR MEMORIAL PLAQUE

2.1.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

**GENERAL INFORMATION** 

SHEET 8/9



IN AREAS WHERE PARKING LOTS ABUT SIDEWALKS AND CAR STOPS ARE NOT USED—REMEMBER THAT THE OVER-HANG OF CARS IS 2'-10." THE TREE IS SET BACK 5'-0" FROM THE CURB ON THE LEFT TO INSURE THAT NO DAMAGE RESULTS IF VEHICLES BACK INTO THE SPACE.

**2.1.1** ADM, CF, MS, HSG, OS, IND

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#### **GENERAL INFORMATION**

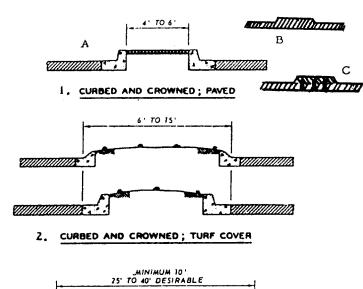
#### SHEET 9/9

#### **MEDIAN CROSS SECTIONS**

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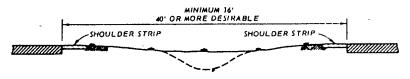
Curbs and paved median may be monolithic as in 1-B or may be surface-mounted on monolithic pavement as in 1-C. If surface-mounted, the curb-and-median slab must be anchored or bonded to the pavement (1-C).

All medians less than 10 feet wide should be designed with barrier curbs. If vegetation is to be maintained on median, or if snow removal will be required, the minimum width of median should be 10 feet. Separating guardrails will be installed in medians if justified by traffic conditions. This information is taken from TM 5-822-2...





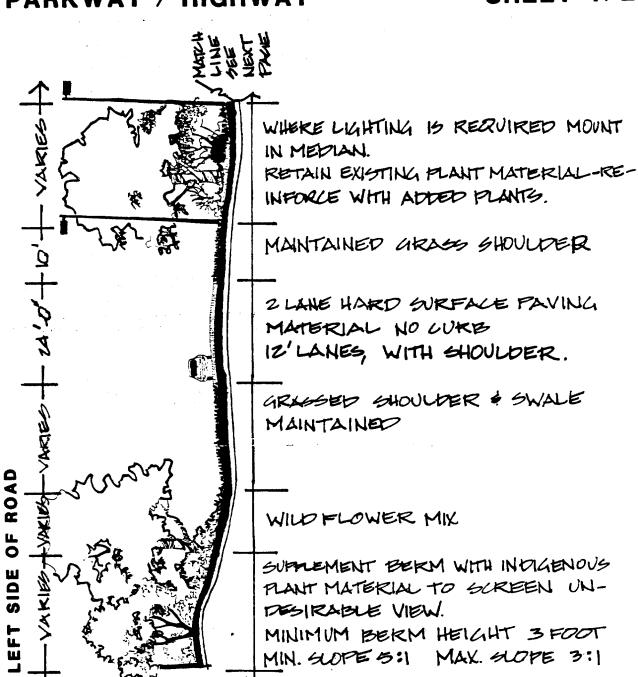
3. CURBED AND DEPRESSED; TURF COVER

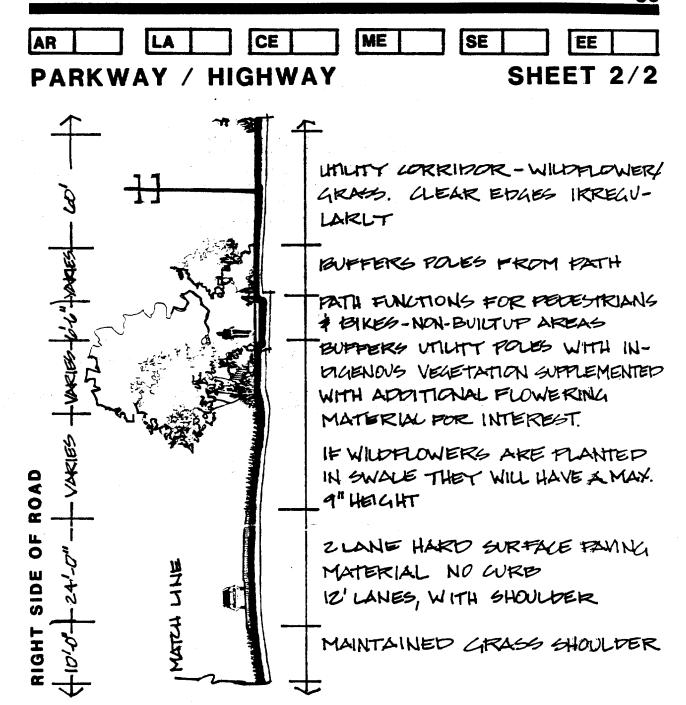


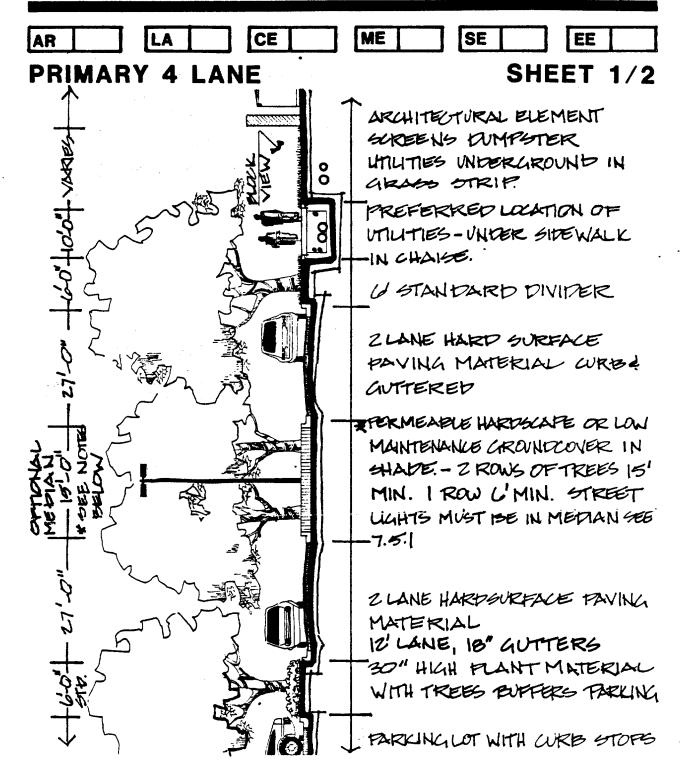
4. FLUSHED AND DEPRESSED; TURF COVER

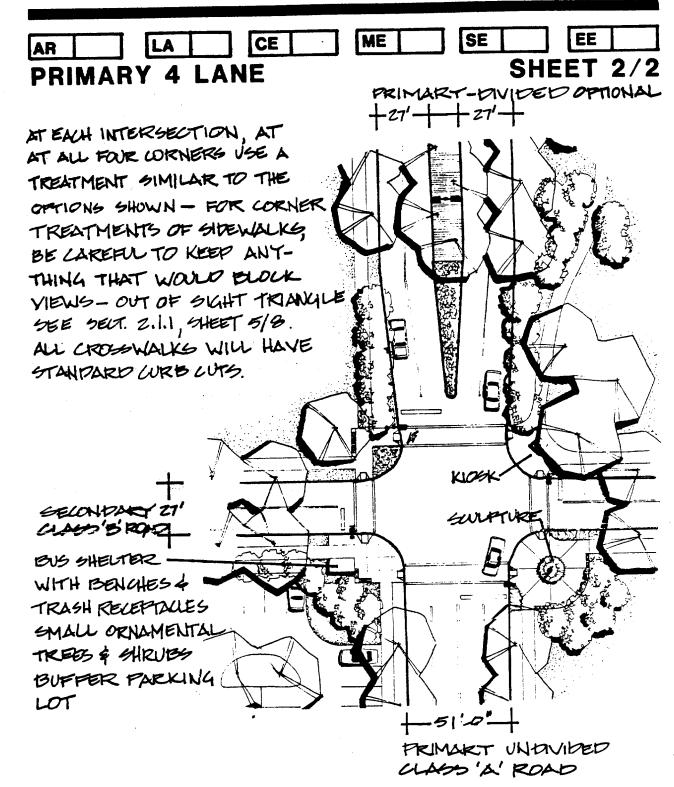
2.2.1 os



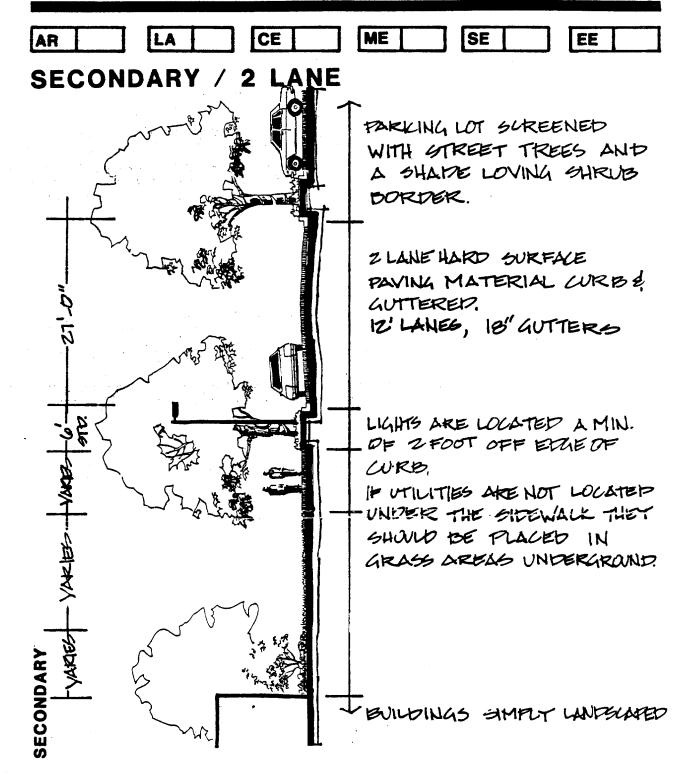








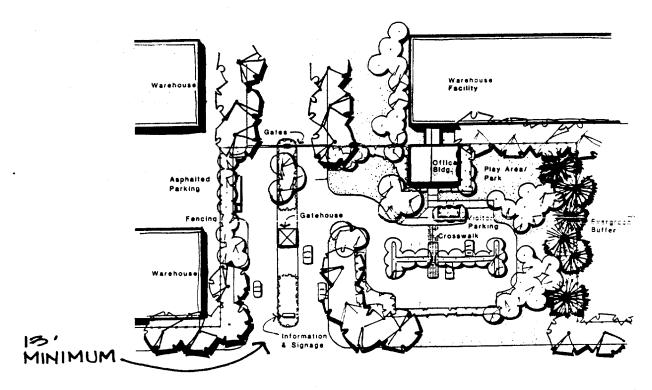
2.4.1 ADM, CF, MS, HSG, OS



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#### SECONDARY / 2 LANE

POADS ENTERING AN INDUSTRIAL AREA WILL PRESENT AN ATTRACTIVE WELL LANDSCAPED APPEARANCE. IF DIVIDED, THE LANES WILL BE A MINIMUM OF 13 FEET. IN OTHER SECTIONS OF THE INDUSTRIAL AREA THE WIDTH OF THE POAD WILL DEPEND ON THE FUNCTION OF THE BUILDING THAT THE ROAD SERVES. APPROPRIATE WIDTHS SHOULD DE DETERMINED BY AN ENGINEER. EOADS, PARKING LOTS, AND PEDESTRIAN WALKS SHOULD BE CLEARLY DEFINED IN THIS ZONE. THE LANDSCAPING TREATMENT DEFINES THE ENTRANCE,

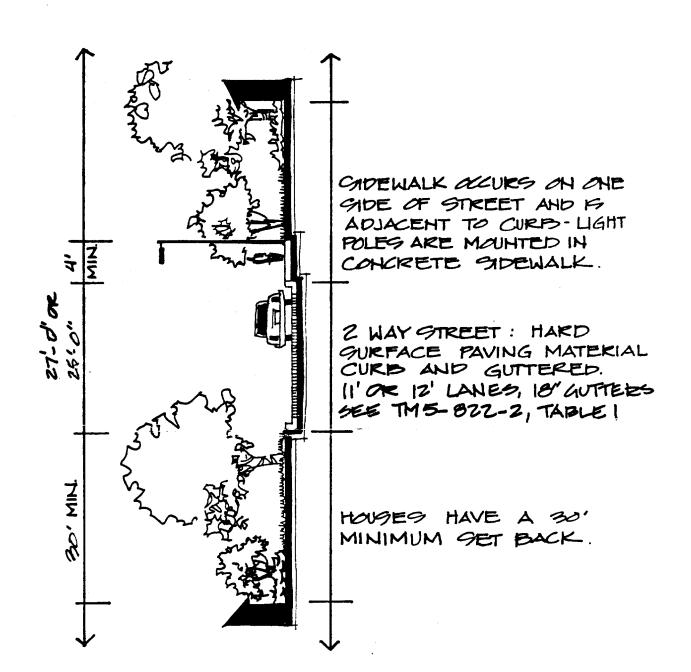


OCKEENS PARKING & FROM THE OUTSIDE LOOKING IN, VISUALLY RELATES TO THE REST OF THE POST.

2.5.1 ADM, CF, MS, HSG, OS



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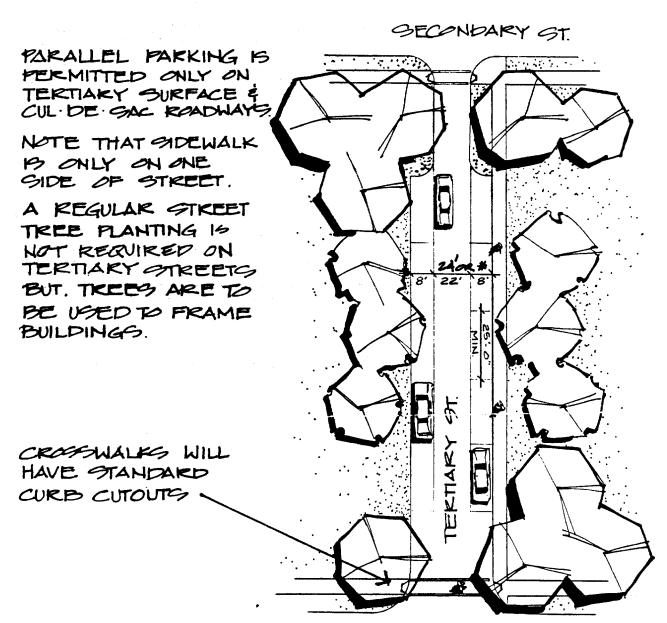
2.5.1 ADM, CF, MS, HSG, OS

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TERTIARY / 2 LANE

SHEET 2/3



\* 60E TM5-822-2 TABLE!

ADM, CF, MS, HSG, OS

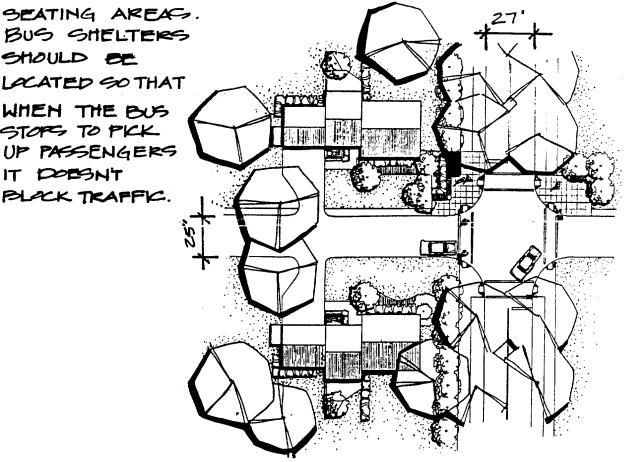
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#### TERTIARY / 2 LANE

SHEET 3/3

THIS PLAN OHOWS VARIOUS APPROPRIATE WAYS OF DEALING WITH INTERSECTIONS OF SECONDARY AND TERTIARY STREETS. NOTE CURB CUTS OCCUR AT CROSSWALKS. SIDEWALKS OCCUR ONLY ON ONE SIDE OF THE STREET PREFERABLY THE SOUTH OR WEST SIDE. TREES AND SHRUBS ARE USED TO BUFFER HOUSING AREA FROM SECONDARY STREET. LANDSCAPING IS ALGO USED TO BUFFER BUS SHELTERS AND

BUS SHELTERS SHOULD BE LACATED SO THAT WHEN THE BUS STOPS TO PICK UP PASSENGERS IT DOESN'T BLACK TRAPFIC.

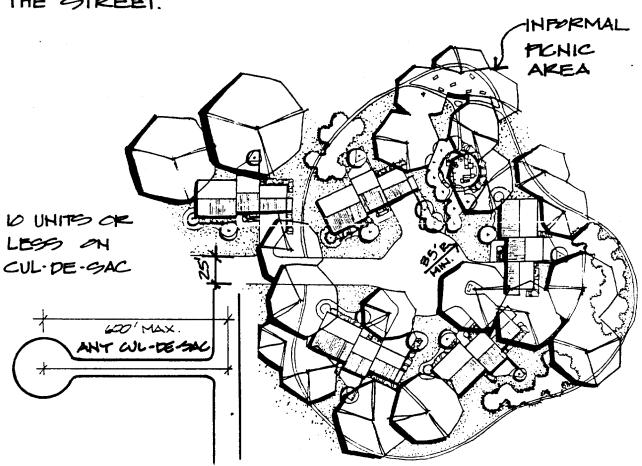


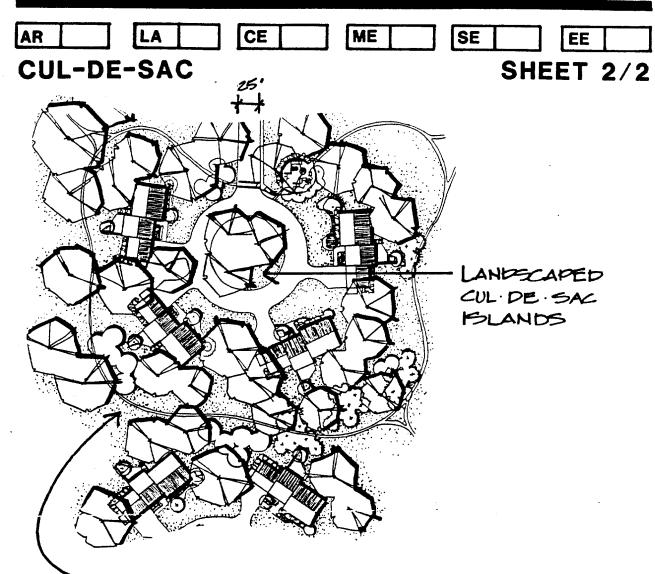
2.6.1

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CUL-DE-	-SAC			SHE	ET	1/2

的现在分词使强力之大,一种特殊是否是自然的一种人,这种问题,可以是否是是不同的种类的人,也可以被称为一种种,可以使用于一种,可以不同的。

TOTLOTS ARE CENTRALLY LOCATED TO HOUSING UNITS AND OCCUR APPROXIMATELY EVERY 1200 FEET. ALL TOTLOTS ARE A MINIMUM OF 1000 SQUARE FEET WITH BENCHES FOR SUPERVISION AND A DRINKING FOUNTAIN LOCATED IN EACH AREA. SCREENS AND PLANT MATERIAL ARE USED TO PROVIDE PRIVACY FOR EACH UNIT. SIDEWALKS OCCUR ONLY ON ONE SIDE OF THE STREET.





A PATH B SHARED BETWEEN BOTH CULDE. SACS. THIS SHOULD BE PART OF A MAJOR CIRCULATION SYSTEM. ON CULDE. SACS THAT WILL HAVE MORE THAN 10 UNITS THERE WILL BEALANDSCAPED ISLAND. UNITS HAVE A 30 FOOT MIN. SETBACK. TOTLOTS ARE A MIN. OF 1000 SQ. PEET. A GROUP MAILBOX AND BENCH IS LOCATED AT THE ENTRY TO THE TOTLOT.

2.7.1 ms. 0s. ind

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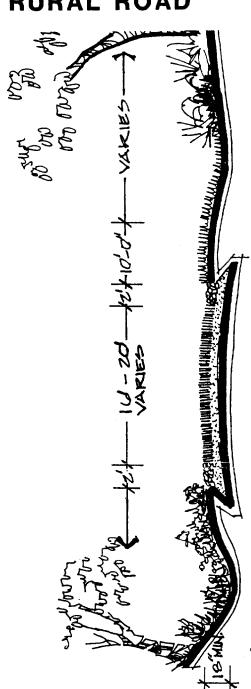
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**RURAL ROAD** 

SHEET 1/2



ON THE SIDE OF THE EWALE
OPPOSITE THE ROAD FROM THE
MID-POINT UP WILDFLOWERS
MAY BE ESTABLISHED

GRASSED SWALE MAX. SLOPE 3:1 MIN. SLOPE 4:1

10'GRASSED SHOVLDER TOBE MAINTAINED REGULARLY-MIN. SLOPE 2% MAX. SLOPE 4%

THIS ASPHALT ROAD WITH 2 FOOT GRAVEL SHOVLDERS
10 TO BE USED IN 'UNDEVELOPED'
AREAS, THAT REQUIRE A SUBSTANTIAL ROAD
SEE TM5-822-2 TABLE!

IF THE SWALE 15 OVER 18" (INCHES)
DEEP, AND AT LEAST 8 (FOOT)
ADJACENT TO THE ROAD CAN BE
CONSTRUCTED WITH A SLOPE
BETWEEN 244% - THE ENTIRE
SHOULDER MAY BE SEEDED
WITH A WILDFLOWER MIX, THIS
SWALE HAVE TO BE CLEANED OUT
PERIODICALLY.

2.7.1 MS, OS, IND

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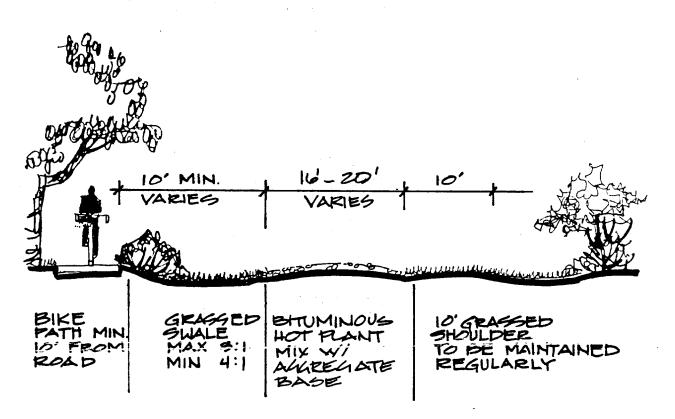
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**RURAL ROAD** 

SHEET 2/2

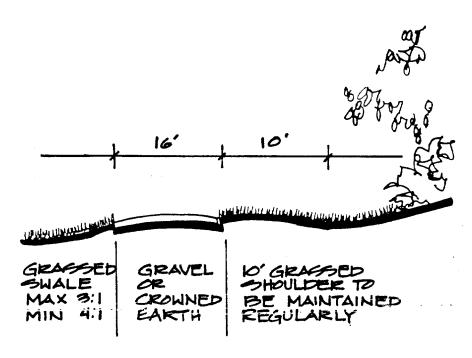


**RURAL ROAD** 

2.8.1 Ms, os

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#### PATROL ROAD



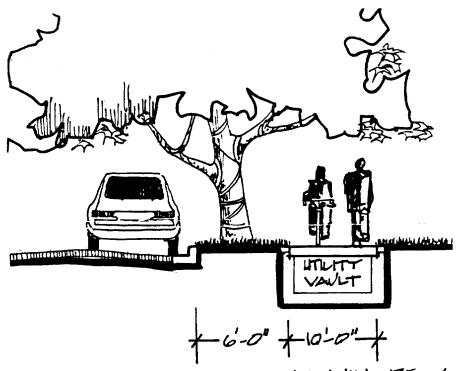
**PATROL ROAD** 

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#### SIDEWALKS

SHEET 1/4

THE WALLWATS IN THESE ZONES WILL CARRY HIGH VOLUMES OF TRAFFIC. WALKS WILL BE CONCRETE AND WELL LIT, AND BE INTEGRATED INTO THE LANDSCAPE. AT THE DESIGNERS DISCRETION, BRICK PAVERS MAY BE USED FOR SIDE WALKS IN THIS ZONE. THE STREET TREES SEPERATE THE PEDESTRIAN FROM VEHICULAR TRAFFIC, THE TREES OFFER BOTH A PHYSICAL AND PSYCHOLOGICAL BARRIER.

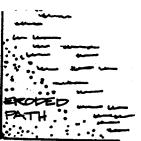


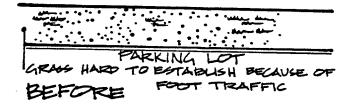
THE MAIN SIDEWALKS IN THIS ZONE WILL BE A MINIMUM OF 10' FEET WIDE. THEY DONOT HAVE TO PARALLEL THE STREET. MINOR SIDEWALKS SHOULD BE WIDE ENOUGH TO SERVE THEIR PURPOSE - NEVER LESS THAN 4 FEET WIDE. SEE UTILITY SECTION FOR ACOUTIONAL INFORMATION ABOUT UTILITY VAULTS.

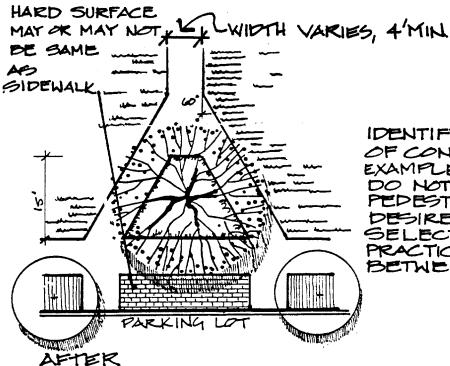
2.9.1 ADM, CF, MS

AR LA CE ME SE EE SIDEWALKS SHEET 2/4









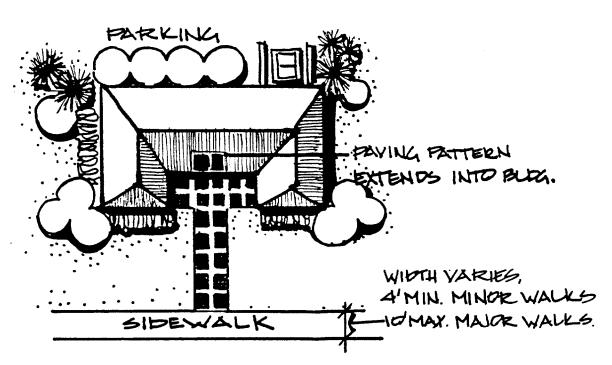
IDENTIFY LIKELY POINTS OF CONFLICT; FOR EXAMPLE, PATHS THAT DO NOT DELIVER THE PEDESTRIAN TO THE DESIRED DESTINATION. SELECT THE SHORTEST PRACTICAL ROUTE BETWEEN DESTINATIONS.

2.9.1 ADM, CF. MS

AR LA CE ME SE EE

**SIDEWALKS** 

SHEET 3/4



WALKS ARE TO BE TROWELED AND BROOM-FINISHED CONCRETE WITH APPROPRIATE EXPANSION AND CONSTRUCTION DINTS. ALTHOUGH CONCRETE HAS A HIGH INSTALLATION COST. MAINTENANCE COST IS LOW AND CONCRETE HAS A LONG ECONOMIC LIFE. OTHER SURFACES SELECTED BY THE DESIGNER, SUCH AS BRICK PAVERS, MAY BE APPROPRIATE IF A WALK IS BUILT IN CONJUNCTION WITH A BUILDING OR PLAZA. THE DESIGNER MUST BE CAREFUL TO SELECT MATERIALS THAT RELATE TO THE POST, AND ARE PERMITTED IN THESE QUIDELINES.

2.9.1 ADM, CF, MS

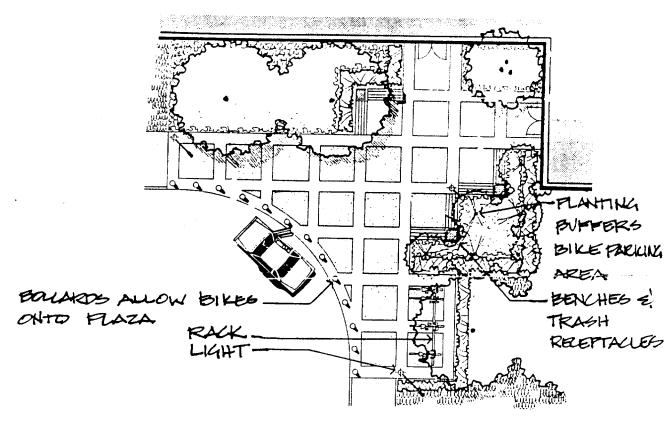
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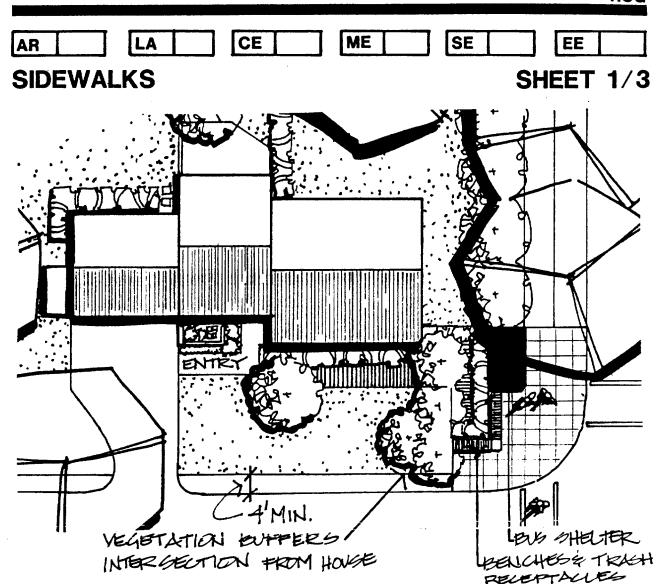
Parkulais Leadin e Propose departe fille et van bekannen protection from Determinent van de Schieber (1985)

**SIDEWALKS** 

SHEET 4/4

LOCATE BILE PARKING AREAS OUT OF PETESTRIAN PATHWATS BUT IN AREAS WHICH ARE VISUALLT SUPERVISED, IF POSSIBLE. THE PARKING AREAS SHOULD BE NEAR THE CYCLIST'S DESTINATION, PREFERABLY WITHIN SO FEET OF MAIN ENTRANCES.





IN THE HOUSING ZONE SIDE WALKS ARE ONLY REQUIRED ON ONE SIDE OF THE STREET BECAUSE OF GENERALLY LOW TRAFFIC VOLUMES. THEIR PREFERRED LOCATION WILL BE ON SOUTHERN & WESTERN SIDES OF THE STREET. AREAS AROUND COMMUNITY MAILBOXES, BUS SHELTERS, AND ENTRANCES TO PLAY. AREAS WILL BE FAVED. THE MINIMUM WIDTH OF WALKS IN THIS ZONE WILL BE A FOOT. ENTRY WALKS SHOULD BE DESIGNED WHEN THE

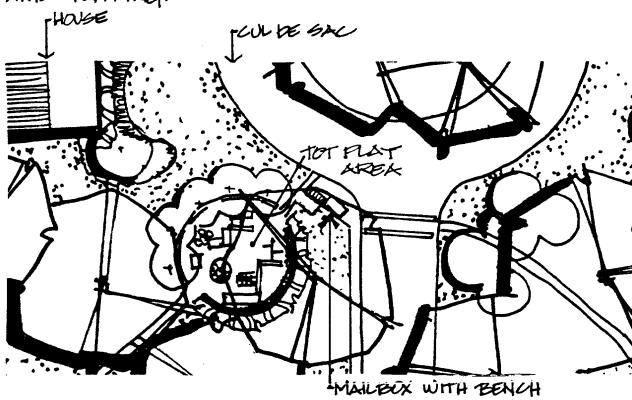
2.9.2 HSG

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#### **SIDEWALKS**

SHEET 2/3

HOUSE 15 DESIGNED. THE ENTRY SHOULD BE GRACIOUS AND INVITING.



SIDEWALK 19 ENLARGED AROUND COMMUNITY MAILBOX AND BENCH-THIS ALSO PROVIDES A NICE ENTRANCE FOR THE PLAT AREA, AND A PLACE FOR PARENT SUPERVISION.

2.9.2 HSG

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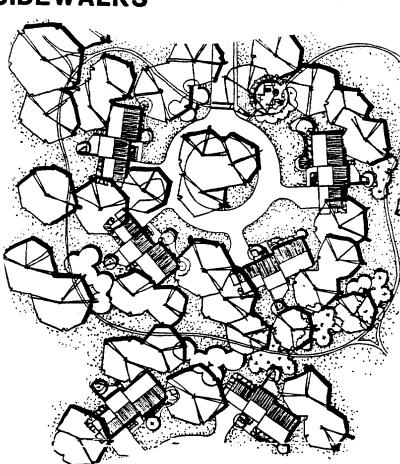
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#### **SIDEWALKS**



#### SHEET 3/3

THESE PATHS WILL SERVE BIKES AND PEDESTRIANS, THERE-FORE THEY ARE TO BE A MIN. OF 6'-6" THESE PATHS CONNECT LIYING UNITS TO EACH OTHER AND THE TOT LOT. THESE PATHS DO NOT HAVE TOBE CONCRETE, THEY MAT BE XEPHALT OF A SOIL AND SUCREGATE MIX WHICH IS THEN COM-PAUTED, SEE SECT ZILI SHEET 5/0 FOR ASPHALT

OCCAGIONALLY A HARD PAVING

FEASIBLE. IN SUCH CASES, THE USE OF A GRANULAR OR COMPOSITION
MATERIAL IS ACCEPTABLE. SUCH
MATERIAL IS TO BE CONTAINED WITH THE PRESSURE TREATED TIMBER
SECURED BY STEEL. SPIKES, THESE
WALKS SHOULD DRAIN TO APPROPIATE DRAINAGE FEATURE.

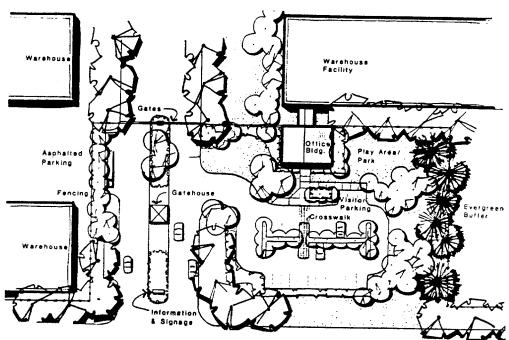
4" X4" MIN.

SOIL/AGGREGATE MX

AR LA CE ME SE EE

**SIDEWALKS** 

SHEET 1/3



IN THE INDUSTRIAL ZONE WALKWAY DEVELOPMENT SHOULD CONCENTRATE ON THE ESTABLISHMENT OF ENTRIES TO MAIN OFFICE BUILDINGS OR HEADQUARTERS. THESE ENTRIES SHOULD BE DESIGNED WITH THE BUILDING. THEY SHOULD CREATE A PLEASANT TRANSITION BETWEEN PARKING AND ENTRY. ENTRY WALK SHOULD NEVER BE LESS THAN 6 FEET WIDE.

DUE TO LOW PEDESTRIAN TRAFFIC VOLUME AND THE AMOUNT OF PAVING IN INDUSTRIAL AREAS. CONCRETE SIDEWALKS ARE NOT NECESSARY, ALTHOUGH THE SEPERATION AND DELINIATION OF PEDESTRAIN WALKS IS NECESSARY. THIS MAY BE ACCOMPLISHED BY STRIPING WITH 5 INCH BANDS OF CREAM REFLECTIVE PAINT. IF ADDITIONAL PROTECTION IS THOUGHT DESIRABLE BY THE DESIGNER THE WOODEN BOLLARD MAY BE USED TO DEFINE PATHS — SEE PLATE 5.11.2. THESE PATHS SHOULD BE 4 FEET WIDE, MINIMUM.

2.9.3

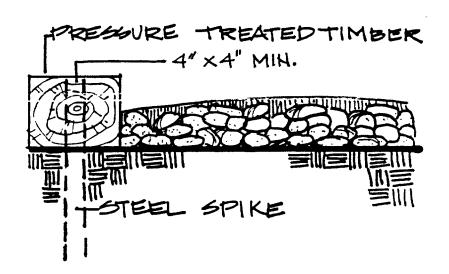
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SIDEWALKS

SHEET 2/3

A HARD PAVING GURFACE MAY NOT BE ECONOMICALLY FEASIBLE. IN SUCH CASES, THE USE OF A GRANULAR OR COMPOSITION MATERIAL IS ACCEPTABLE. SUCH MATERIAL IS TO BE CONTAINED WITH PRESSURE TREATED TIMBER SECURED BY STEEL SPIKES. THESE WALKS SHOULD FOSITIVELY DRAIN TO APPROPRIATE DRAINAGE FEATURE.



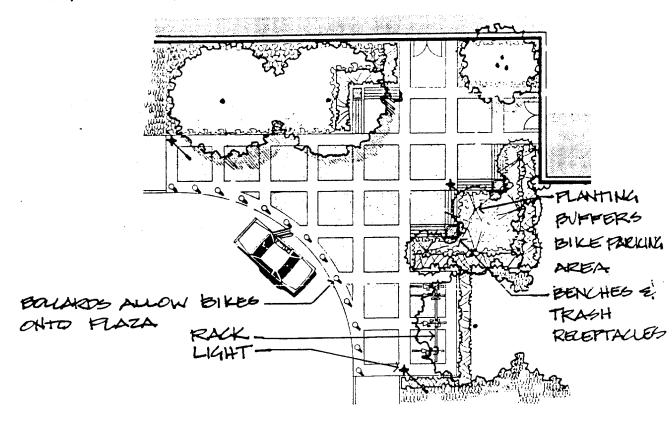
2.9.3

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#### **SIDEWALKS**

SHEET3/3

LOCATE BILE PARKING AREAS OUT OF PETESTRIAN PATHWATS BUT IN AREAS WHICH ARE VISUALLT SUPERVISED, IF POSSIBLE. THE PARKING AREAS SHOULD BE NEAR THE CYCLIST'S DESTINATION, PREFERABLY WITHIN SO FEET OF MAIN ENTRANCES.

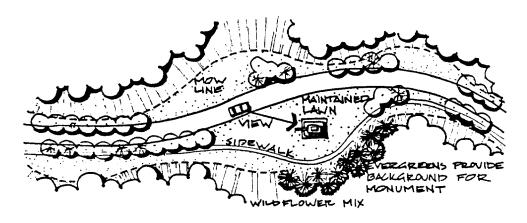


2.9.4<sub>os</sub>

AR LA CE ME SE EE

**SIDEWALKS** 

SHEET 1/3



#### PASSIVE USE AREA

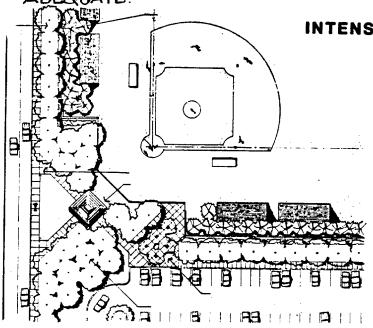
IN PASSIVE USE AREAS A 4' WALK IS ADEQUATE.

IF THE WALK IS ALSO A PART OF THE BIKE

PATH SYSTEM IT SHOULD BE A MINIMUM OF 6.5

FEET. APPHALT WALKS WITH CLEARLY DEFINED EDGES ARE

ADEQUATE.



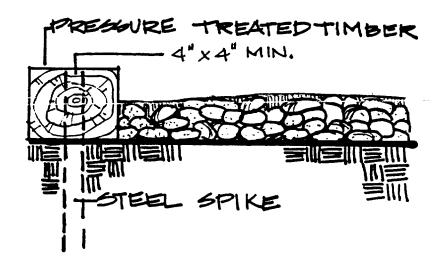
INTENSIVE/ACTIVE USE AREA

IN OPEN SPACE
WALK WIDTH SHOULD
BE DETERMINED BY
AMOUNT OF USE.
IN AREAS WITH HIGH
TRAFFIC VOLUMES
IO' WALKS WILL
BE REQUIRED.
THEY WILL BE TROWELD
ED AND BROOM-FINISHED
CONCRETE WITH
APPROPRIATE
EXPANSION AND
CONSTRUCTION
JOINTS.

2.9.4

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SIDEWA	LKS			SHE	ET 2/3

A HARD PAVING GURFACE MAY NOT BE ECONOMICALLY FEASIBLE. IN SUCH CASES, THE USE OF A GRANULAR OR COMPOSITION MATERIAL IS ACCEPTABLE. SUCH MATERIAL IS TO BE CONTAINED WITH PRESSURE TREATED TIMBER SECURED BY STEEL SPIKES. THESE WALKS SHOULD POSITIVELY DRAIN TO APPROPRIATE DRAINAGE FEATURES.



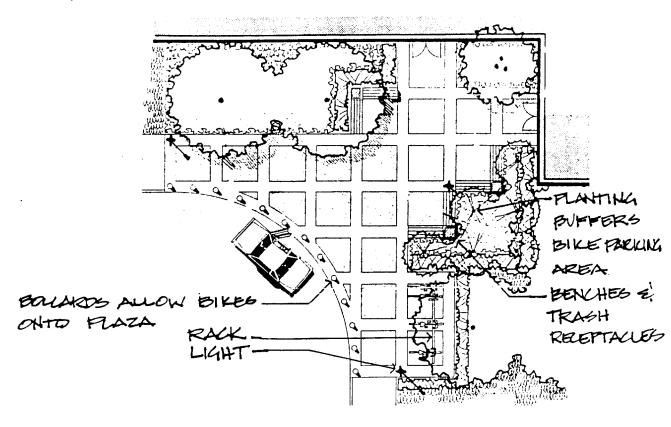
2.9.4 os

AR LA CE ME SE EE

**SIDEWALKS** 

SHEET 3/3

LOCATE BILLE PARKING AREAS OUT OF PETEGTRIAN PATHWATS BUT IN AREAS WHICH ARE VISUALLT SUPERVISED, IF POSSIBLE. THE PARKING AREAS SHOULD BE NEAR THE CYCLIST'S DESTINATION, PREFERABLY WITHIN SO FEET OF MAIN ENTRANCES.



2.10.1 ADM, CF, MS, HSG, OS, IND

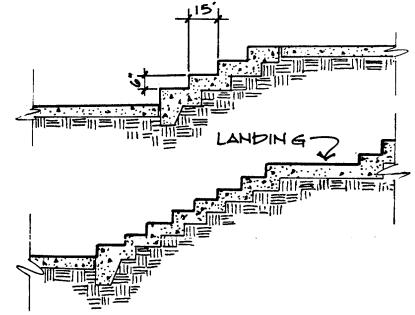
AR LA CE ME SE EE

### **RAMPS & STEPS**

RAMPS PROVIDE ALLESS TO FACILITIES FOR HANDICAPPED PERSONS. THEY REQUIRE A SIGNIFICANT HORIZONTAL DIMENSION IN RELATION TO THE CHANGE IN ELEVATION.

GTEPS ALL EXTERIOR STEPS ARE TO HAVE A MINIMUM WIDTH OF 4'-0". ALL STEPS SHOULD HAVE A UNIFORM TREAD WIDTH OF 15" AND SHOULD NOT HAVE RISERS GREATER THAN 6". ALL STEPS SHOULD OCCUR IN PAIRS. IF THERE ARE MORE THAN 9 RISERS, THE STEPS SHOULD BE SEPERATED BY A LANDING.

STEP PROPORTION



HANDRAILS FOR EXTEROIR STEPS HANDRAILS SHOULD BE PROVIDED ON BOTH SIDES, AND SHOULD EXTEND PAST THE TREAD AT THE TOP AND BOTTOM OF THE STEPS:

LEVEL OF ILLUMINATION TO ENSURE SAFE
NIGHTIME USE, SEE UTILITIES & LIGHTING

ADM, CF, MS, HSG, OS, IND

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#### **BIKE PATH SYSTEM**

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SHEET 1/8

The bicycle as a means of recreational and destination oriented travel should be considered at the Post. Bike travel should be encouraged to conserve energy, promote physical fitness and also to reduce automobile parking requirements.

A bikeway system should provide direct routes between primary traffic origins and destinations within the installation. The network should be continuous to facilitate and encourage bike usage. Bikeway design should minimize potential conflicts between bikes, pedestrians and vehicular circulation and eliminate potential stationary hazards along its path.

In selecting a site for a bikeway scenic beauty is of special significance in promoting its use by cyclists. Variety in terrain is a stimulant and challenge to riders and encourages repeat use, although it may increase construction costs. Insofar as possible, the bikeways should be designed to follow the contour of the land. Some elements that make a challenging ride are: a little up-and-down; winding open road as well as seclusion of the natural wooded area where safety factors are not a major concern; passing by high-use areas; an opportunity to increase the bike velocity in pedaling downhill combined with a chance to pedal harder in the cyclist's hill-climbing challenge; following a stream; circling a lake and crossing a well-designed and attractive bridge. In addition, features of a historic or scenic interest should not be forgotten in the bikeway's location. In fact, the bikeway which is used primarily by recreation cyclists usually should lead to a well-known destination on Post. The shortest distance to a destination is not essential for this type of bike route. Also consider locating bikeways some distance away from high volume roads where possible and the "on-roadway" bikelanes on secondary and lightly used residential streets within the Post.

ADM, CF, MS, HSG, OS, IND

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### **BIKE PATH SYSTEM**

**SHEET 2/8** 

Before designing and constructing the bicycle movement and support facilities the following factors are to be considered.

- the cyclists and the potential cyclists and their needs in respect to facilities which will motivate their use;
- the terrain and general contour of the land, which has a bearing on minimum-maximum grades;
- land-use compatibility with the immediate surroundings;
- length and width of the paths, to properly handle the estimated numbers of users;
- aesthetic values and points of interest;
- design speed of bicycles;
- road crossings where the bikepath should cross at some distance from intersections to permit adequate motorist reaction time;
- drainage;
- radius of curvature for turns;
- provision of turn-around spots every mile on bikeways for maintenance equipment;
- sign and lane markings;
- use of existing facilities where practical;
- availability or necessity for providing bridges;
- bicycle parking and storage;
- rest area equipment, concession facilities, and comfort stations;

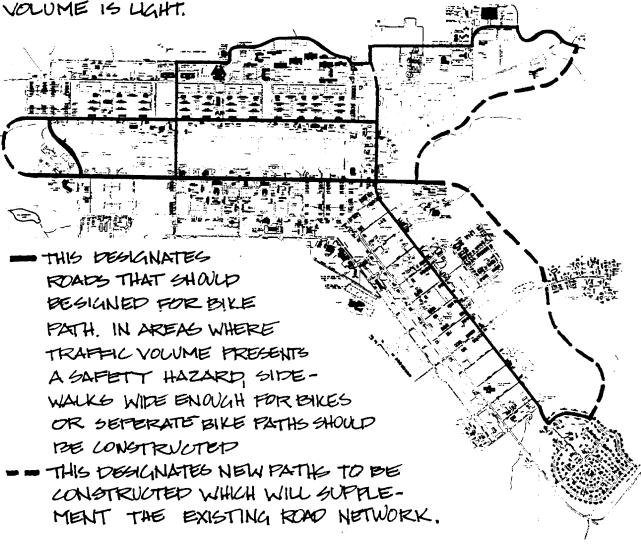
ADM, CF, MS, HSG, OS, IND

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#### **BIKE PATH SYSTEM**

SHEET 3/8

THIS MAP REPRESENTS A PRELIMINARY LAYOUT OF BIKE PATHS ON FORT GORDON. BEFORE ANY MAJOR CONSTRUCTION OF PATHS, A STUDY OF BIKING HABITS AND NEEDS SHOULD BE COMPLETED. BIKE PATHS SHOULD GO WHERE PEOPLE WANT TO GO. THE ROAD SYSTEM OFFERS A BIKE SYSTEM IN AREAS WHERE TRAFFIC



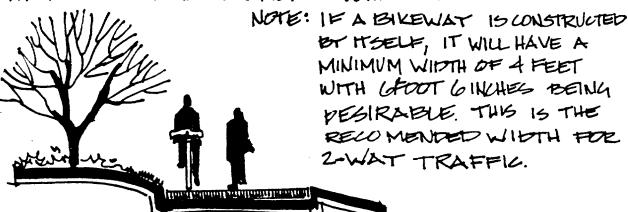
2.11.1 ADM, CF, MS, HSG, OS, IND

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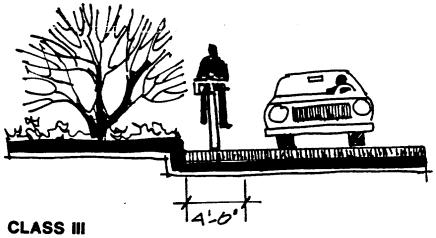
### **BIKE PATH SYSTEM**

SHEET 4/8

THE BIKE TRAFFIC VOLUME AT FORT GORDON IS MODERATE TO LIGHT, THEREFORE A CLASSITE BIKEWAY IS APPROPRIATE. IN THIS CATEGORY THE RIGHT-OF-WAY IS SHARED WITH ETHER PEDESTRIANS OR MOTOR VEHICLES.



CLASS III BIKEWAY/WALK



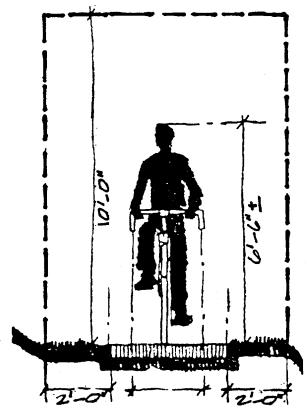
BIKEWAY/ROAD

2.11.1 ADM, CF, MS, HSG, OS, IND

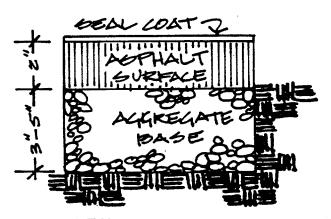
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#### **BIKE PATH SYSTEM**

**SHEET 5/8** 



CLEARANCE



BIKEPATH

PROVIDE SPACE FOR THE CYCLIST BASED UPON THE DIMENSIONS TO THE LEFT

SHRUBS BORDERING THE PATHS SHOULD BE OUT BACK AT LEAST THREE PEET FROM THE BIKE PATH EDGE GO THAT ANNUAL GROWTH WILL NOT ENCROACH ON THE PATH. PRUNE LOW TREE BRANCHES OVER -HANGING OR BORDERING THE PATH TO A HEIGHT OF TEN FEET TO PERMIT LYCLIST PASSAGE AS WELL AS ACCESS FOR MAINTENANCE VEHICLES. ZHOOT HOPIZOHTAL BISTANCE IS REQUIRED FROM THE EXCES OF THE PATH TO ANY CRUECT ORGRADE CHANGE ALL BILYOLE PATHS MUST BE LONGTRUCTED ON A WELL DRAINED SUBGRADE OR SUB-BASE TO REVENT SETTING OR HEAVING THROUGH FROST ACTION.

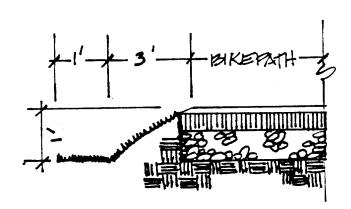
2.11.1 ADM, CF, MS, HSG, OS, IND

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#### **BIKE PATH SYSTEM**

SHEET 6/8

PROPER DRAINAGE, TO INSURE THAT SURFACE WATER
WILL NOT ACCUMULATE AND WASH OUT SECTIONS OF THE
BIKEWAT OR IN ANT WAT HINDER RIDERS IS ESSENTIAL.
WATER MUST BE REMOVED UNDER THE PATH SOTHAT IT
WILL NOT FREEZE DURING THE WINTER, CAUSING
HEAVING AND BUCKLING.



THE BILEPATH SHOULD BE I FOOT ABOVE EXISTING GRADE, FROM PATH TO GRASSED CHANNEL THE SLOPE SHOULD NOT EXCEED 2:1.

ADM, CF, MS, HSG, OS, IND

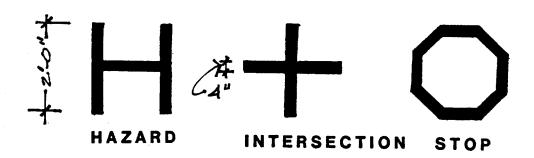
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### **BIKE PATH SYSTEM**

SHEET 7/8

SUNS WILL BE ERECTED OR INSTALLED AT EACH POINT REQUIRING A DECISION BY THE CYCLIST. WARNING SIGNS SHOULD OCCUR APPROXIMATELT SO TO 65 FEET IN ADVANCE OF SAFETY HAZARD SITUATIONS. MOUNTED SUNS SHOULD BE KEPT TO A MINIMUM BECAUSE OF THE VISUAL CLUTTER THAT MAY RESULT; AND AGO THESE SIGNS ARE SUSCEPTIBLE TO VANDALISM. THEREFORE PAVEMENT MARKINGS ARE MORE APPROPRIATE.

PERMITTED SYMBOLS FOLLOW!:

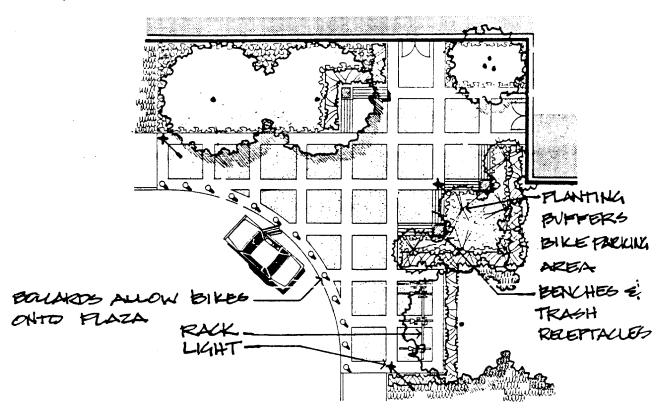


MOUNTED SIGNS WILL CONFORM WITH SIGNING STANDARDS
SEE SECTION 6. BIKE FATH SIGNS WILL HAVE A BROWN
BACKGROUND WITH TAN LETTERS - SEE PAGE 6.1.1 SHEET
2/2 TABLE 2-1 FOR STANDARD COLORS. TAN SHOULD
BE A REFLECTIVE PAINT. LANE MARKINGS
INFORM BOTH THE CYCLIST AND THE MOTORIST OF THEIR RESPECTIVE LANES. THE
LANE DESIGNATION SHOULD BE MARKED WITH TWAT BIKE TRAFFIC
A CONTINUOUS TAN REFLECTIVE STRIPE, STRIPE
4 INCHES WIDE. FOR SAFETT, INTERSECTIONS MAT BE DONE AS SHOWN.

2.11.1 ADM, CF, MS, HSG, OS, IND

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LOVATE BILLE PARKING AREAS OUT OF PEDESTRIAN PATHWATS BUT IN AREAS WHICH ARE VISUALLT SUPERVISED, IF POSSIBLE. THE PARKING AREAS SHOULD BE NEAR THE CYCLIST'S DESTINATION, PREFERABLY WITHIN 50 FEET OF MAIN ENTRANCES.



2.12.1 ADM, CF, MS, HSG, OS, IND

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### BANK STABILIZATION

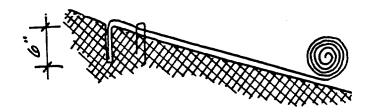
SHEET 1/2

When circulation systems are installed and ground is disturbed, the ground disturbed is to be revegetated as quickly as possible. Sodding, matting, hydroseeding, and reforestation are suitable ways of establishing a vegetative cover.

Sodding gives the fastest possible protection by vegetation. It is an expensive operation and should be applied to critical areas only. Sod can be placed at any time of the year provided that soil moisture is adequate and the ground is not frozen.

The purpose of matting is to stabilize the surface of the soil and to prevent erosion during the establishment of vegetation. This method is less expensive than most other stabilization techniques. Matting must be well anchored to prevent slippage during rainstorms. Matting should be laid parallel to the slope or direction of run off.

Uphill ends should be buried in a 6" deep slot and stapled on 12" centers across width of the mat.



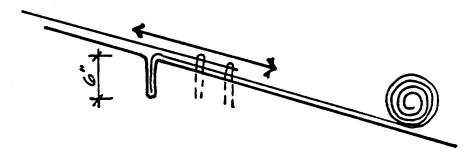
2.12.1 ADM, CF, MS, HSG, OS, IND

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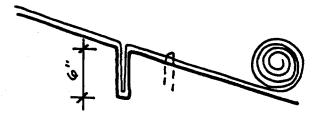
#### BANK STABILIZATION

SHEET 2/2

At joints the downhill end should be overlapped with the uphill end of the new roll which is inserted in a 6" slot and stapled on 12" centers.



On very severe slopes check slots should be used. These are 6" deep slots into which a tight fold of matting is inserted. The slot is filled and tamped and staples inserted on 12" centers down slope of the check slot.



See section 4.7.1 for information concerning erosion control through rip-rapping and hydroseeding and section 4.8.1 for information about reforestation.

# **DESIGN ELEMENTS MATRIX**

3. Parking	DISCIPLINE			E	LAND USE ZONE							
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1. General Information 2. Circulation & Layout							1	1 1	1 1	1	1 1	1 1
3. Off Street Surface Parking 4. On Street Parallel Parking 5. Residential Driveways	1		-				1	1	5 1	2 2 1	1	3 1
6. Loading Docks 7. Landscaping							1 1	1 1	1 1	1	1	<u>1</u> 1
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#### **GENERAL INFORMATION**

SHEET 1/6

#### **OBJECTIVES**

The design of parking areas is often done as an afterthought to the design of various facilities. Demands for additional space are constant. Accommodations for parking, inherently an unattractive space, are to be planned as part of the entire design, to minimize the negative appearance of these vehicle storage areas. The objectives for establishing a planned parking system throughout the Post are twofold. First, the visual impact of parking areas is to be minimized in the design of new and the renovation of existing lots. Second, through design and master planning, as well as by official policy the land area required for parking is to be minimized.

#### TYPES OF PARKING ARRANGEMENTS PERMITTED

Three types of parking arrangements are permitted on Post. The preferred type of parking is Off Street Surface Parking lots in groupings of 75 to 100 full car spaces or less. Facilities requiring more than 100 spaces are to have a series of such lots connected by an external perimeter drive. Also permitted, is On Street Parallel Parking in areas where a lack of space or physical arrangements of existing buildings make surface lots impractical. Also permitted are Residential Driveways that are a minimum of 35 feet deep and which allow cars to back into tertiary surface or cul-de-sac streets only. There shall be no provisions for the construction of new on street, head in parking or spaces that would require the backing onto a street or road except in residential driveway situation. REQUIRED OR ALLOWED PARKING SPACES

The following table lists the official required number or amount of spaces for nonorganizational vehicles as listed in DoD 4270 M.l

Facility

Number of Spaces

#### Administrative

Administration, Headquarters and Office Buildings

50% of assigned personnel

Fire Stations 3 Stall 7 Stall

7 spaces 10 spaces

Guard Houses, Brigs, Military Police Stations

30% of guard strength

3.1.1 ADM, CF, MS, HSG, OS, IND

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#### **GENERAL INFORMATION**

### SHEET 2/6

#### Community Facilities

Cafeteria, Civilian, when not included in Community Shopping Center

Chapels

Commissary Stores, Food Sales, when not included in Community Shopping Center

Community Shopping Center, including such elements as Main Exchange, Miscellaneous Shops, Restaurant, Commissary Sales Store, Bank, Theater Post Office

Exchanges, Main, when not included in Community Shopping Center

Libraries Central

Branch

Schools, Dependents
Without Auditorium
With Auditorium

Dental Clinic (both separate and as part of another facility such as a hospital)

15% of seating capacity (1 space/7 seats)

15% of seating capacity (1 space/7 seats)

2% of authorized customers served, (3 spaces/1000 SF of gross floor space)

4% of authorized customers served (4 spaces/1000 SF gross sales area or 1 space/6 seats)

2% of authorized customers
served
(3 spaces/1000 SF of
gross floor space)

1 space for each 500 SF of floor area 2 spaces

2 spaces per classroom, 2 spaces per classroom, plus 15% of auditorium seats

3 spaces per operating rm.

3.1.1 ADM, CF, MS, HSG, OS, IND

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### GENERAL INFORMATION

SHEET 3/6

Hospitals and Dispensaries (Clinics 1)

(.59x1 + .19x2) spaces, where:
X1 = all personnel working within
 the facility on a continual basis

X2 = average daily outpatient load for the peak month

The formula given is applicable only where there are no quarters for staff or patients within walking distance, where there is no public transportation system serving the facility, where there is no military shuttle system and where car-pooling is not practical. To the extent that any of the above conditions do exist, the Xl and X2 values will be reduced appropriately to reflect these other means of arrival at the facility.

Service Clubs

2% of enlisted strength served

(1 space/6 seats)

Swimming Pools

20% of design capacity of

pool

Theaters, when not included in Community Shopping Center

25% of seating capacity (1 space/4 seats)

Gymnasiums (if only one at an installation)

1% of military strength

served

Area Gymnasium (e.g., regimental)

10 spaces

Field House, combined with Football, Baseball and other outdoor recreation facilities 1% of military strength

Facility

Number of Spaces

#### Housing

Family Quarters

2 spaces per living unit

Temporary Lodging Facilities

90% of bedrooms
(9 spaces/10 rooms)

3.1.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

### GENERAL INFORMATION

### SHEET 4/6

#### Industrial

Warehouses

l space for each 500 SF office area, plus l space for each 4 persons assigned to storage activities

Maintenance Shops

38% of assigned personnel, largest shift

Laundries and Dry Cleaning Plants

38% of civilian employees, largest shift

Bakeries

38% of civilian employees, largest shift

#### Mission Support

Barracks and Dormitories

60% of peacetime design capacity

Bachelor Officer's Quarters

90% of occupants' suites

Enlisting Personnel Dining Facilities for:

Basic and/or recruit training, advanced individual training, service schools, recruit reception stations 38% of military and civilian food service operating personnel, largest shift

Permanent party, garrison (including Army TOE and TDA units) air installations (stations), support units, construction battalions, shipyards, weapon plants, personnel transfer and overseas processing centers.

38% of military and civilian food service operating personnel, largest shift, plus 8% of enlisted personnel (patron parking) to be served

Central Food Preparation Facilities

38% of military and civilian food service operating personnel, largest shift

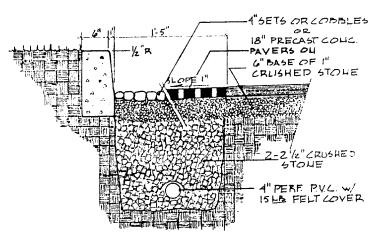
3.1.1 ADM, CF, MS, HSG, OS, IND

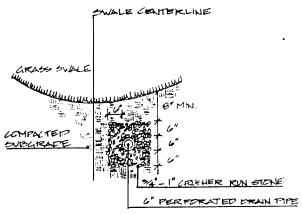
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#### GENERAL INFORMATION

### SHEET 5/6

A minimum of 10 percent of the total parking lot area will remain unpaved and be landscaped or covered by an open mulch material. Surface drainage will be directed to these porous areas wherever practical. The use of porous pavements, "Dutch" or "French" drains, grates or other measures to increase percolation of rainfall is expected whenever practical. The increased percolation and overall reduction of runoff amounts is desired for plant growth and cost savings in storm drain systems.





PLACE THE PIPE CAPPLENTER TO PREVENT WASH-

#### FRENCH DRAIN DETAIL

#### PERFORATED DRAIN TILE

#### PAVING

All permanent parking areas will be paved with concrete or a bituminous asphalt.

All temporary or short term parking areas will be paved with an adequate (4") gravel cover that is to be contained on the lot through the use of secured edging timbers.

Parking areas are to be designed to prohibit vehicular access onto grassed or landscaped areas.

#### STRIPING

All parking spaces and pedestrian crosswalks are to be marked in white by paint or applied vinyl coatings. The use of red or yellow marking pavements shall be used for safety purposes and kept to a minimum.

Parking areas shall be designed for easy entrance and exit, and shall provide 90 degree parking whenever practical, however, in short term, high-traffic parking areas for such activities as commissaries and exchanges, 60 degree parking may be provided.

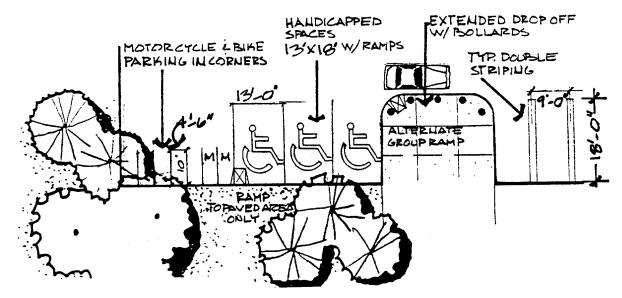
3.1.1 ADM, CF, MS, HSG, OS, IND

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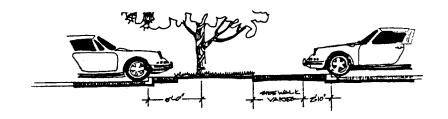
#### **GENERAL INFORMATION**

SHEET 6/6

Stall dimensions will be 9 x 16 feet where overhang occurs, and 9 x 18 feet without overhang. Aisles and access lanes will be 24 feet wide. Planting islands for 90 degree parking, where required, will be  $12' \times 36'$  feet. Handicapped spaces will be a minimum of  $13 \times 18$  feet and include a ramp or other means of access to the pedestrian circulation system.



Parking lots are to be located to take advantage of shared relationships such as with a chapel and school, or an office building and service club wherever practical. The grouping of facilities of shared use patterns is expected.



3.2.1 ADM, CF, MS, HSG, OS, IND

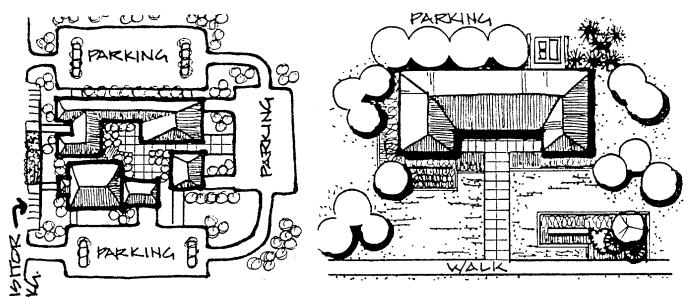
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### CIRCULATION AND LAYOUT

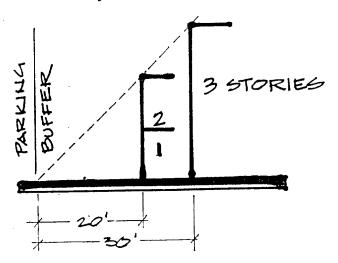
SHEET 1/3

LOCATION AND SETBACKS

Parking areas will generally be placed to the rear and sides of all buildings, near secondary entrances. Visitor parking is to be provided in close proximity to the primary entrance of the building. When side or rear sites are not practical, the parking should not block the view of or the area immediately in front of the main entrance.



Two and one story buildings will be setback a minimum of 20 feet from parking areas; for every additional story the setback will increase by 10 feet.



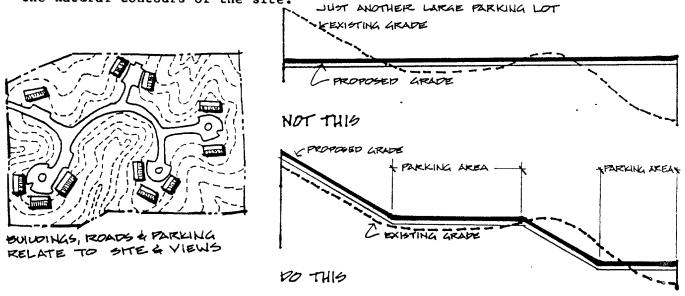
3.2.1 ADM, CF, MS, HSG, OS, IND



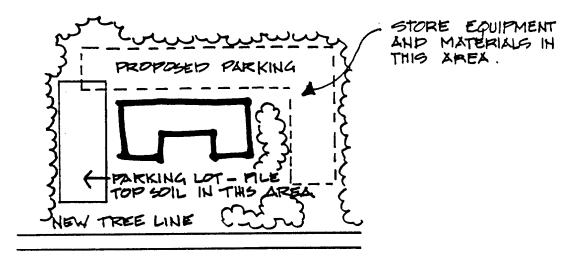
## CIRCULATION AND LAYOUT

SHEET 2/3

Finished grades will be 1% or greater. Slopes along aisles through lots are recommended to be 6% or less, but in severe cases 8% is permitted. Transverse slopes are to be 1-1/2% or less. Parking areas are to be sited to conform to the natural contours of the site.



Parking lots at new construction sites will be used as staging areas for equipment and building materials as well as for the stockpiling of topsoil and excavated earth.



3.2.1 ADM, CF, MS, HSG, OS, IND

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### CIRCULATION AND LAYOUT

SHEET 3/3

THE ADAPTATION OF STREETS, WHICH CARRY LITTLE TRAFFIC AND ARE IN AREAS WHERE THERE IS A SEVERE PARKING PROBLEM, INTO PARKING LOTS IS FEASIBLE. THE FOLLOWING OPTIONS ARE POSSIBLE. NOTE THAT NO OPTION PERMITS ASTRAIGHT SHOT THROUGH TO THE OTHER STREET.

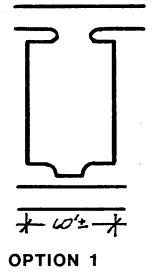
OPTION 1 SIMPLY ENLARGES THE STREET TO PERMIT DOUBLE LOADING. THE BACK-IN SPACE

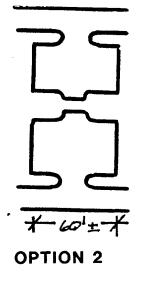
PROVIDES THE SPACE TO TURNAROUND.

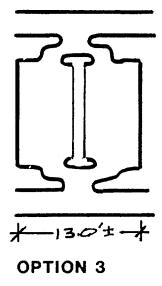
EXISTING ROAD

OPTION 2 15 SIMILAR TO 1 EXCEPT EACH STREET HAS A PARKING LOT.

OPTION 3-THE STREETS ARE CONNECTED BUT IT 10 NOT A STRAIGHT SHOT. THIS SOLUTION REQUIRES A LOT OF SPACE



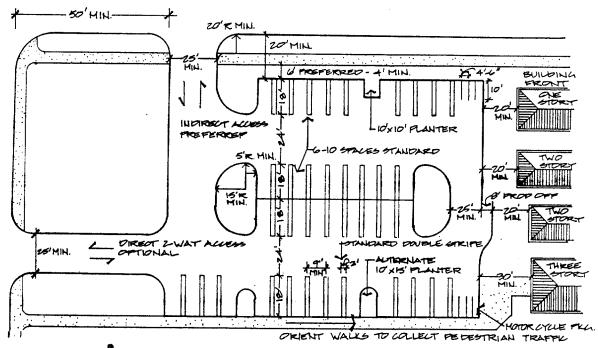




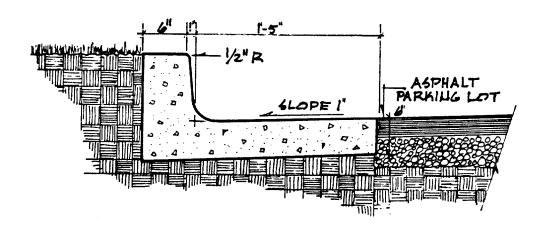
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# OFF STREET SURFACE PARKING

SHEET 1/3



TYPICAL 90° STANDARD PARKING LAYOUT

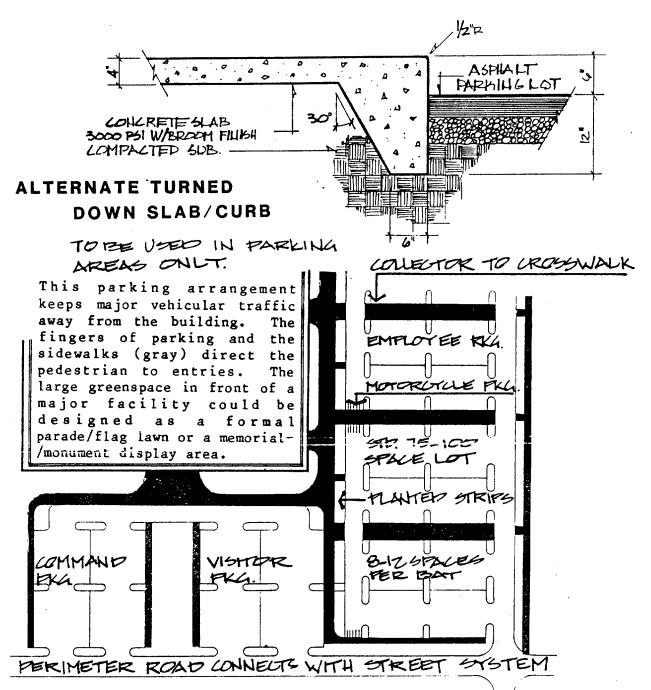


STANDARD CURB AND GUTTER

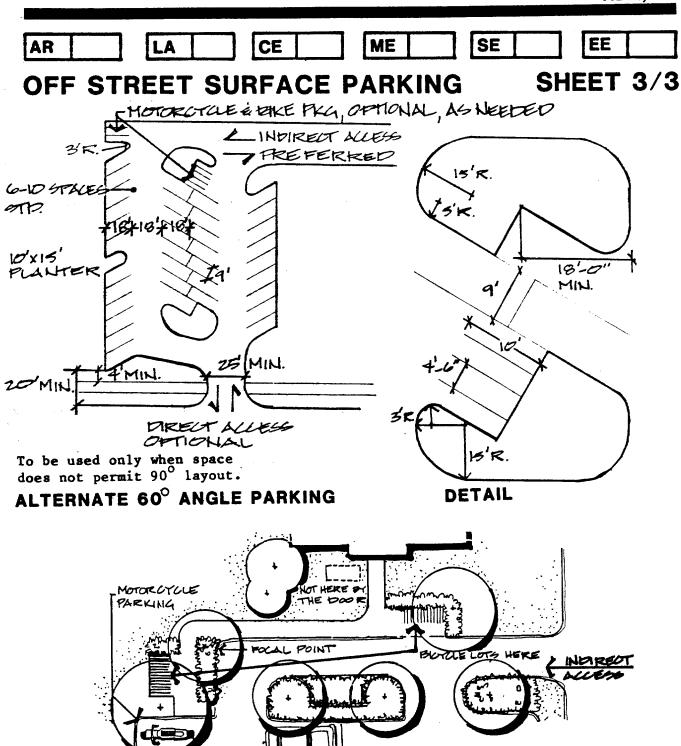
AR LA CE ME SE EE

### OFF STREET SURFACE PARKING

SHEET 2/3



TYPICAL LARGE STRUCTURE PARKING LAYOUT



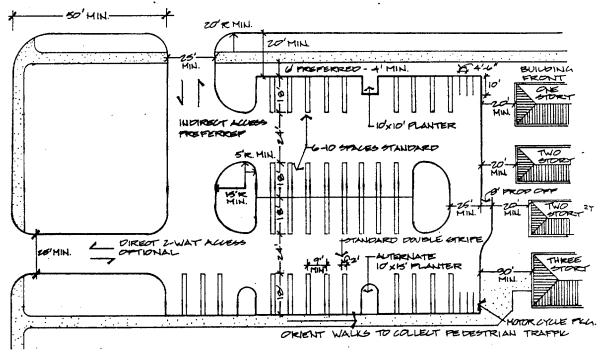
ENTRY TREATMENT

3.3.2

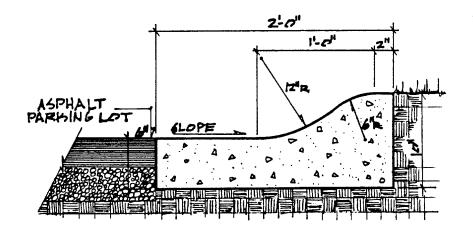
AR LA CE ME SE EE

### OFF STREET SURFACE PARKING

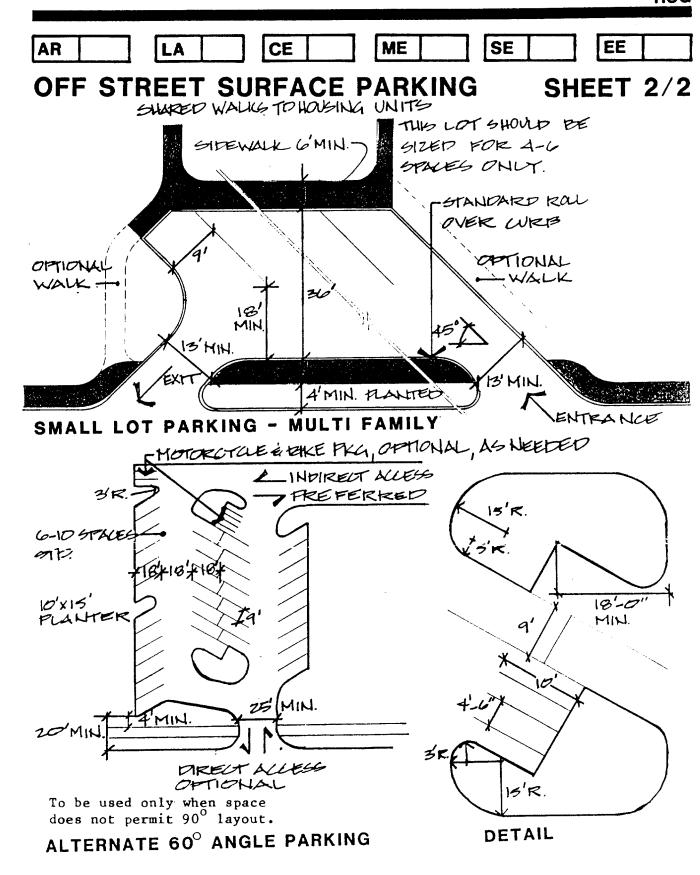
SHEET 1/2



TYPICAL 90° STANDARD PARKING LAYOUT



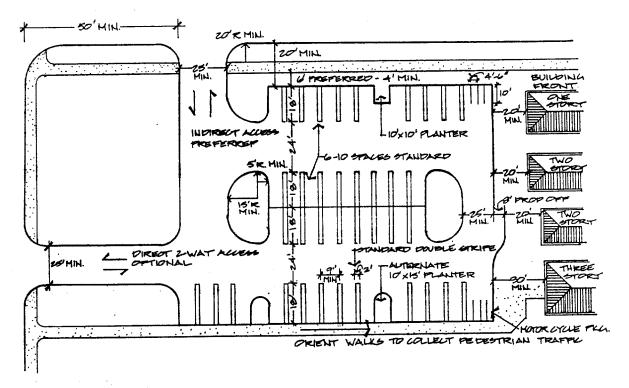
STANDARD ROLL OVER CURB



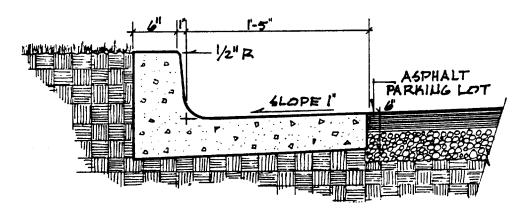
AR LA CE ME SE EE

### OFF STREET SURFACE PARKING

SHEET 1/2



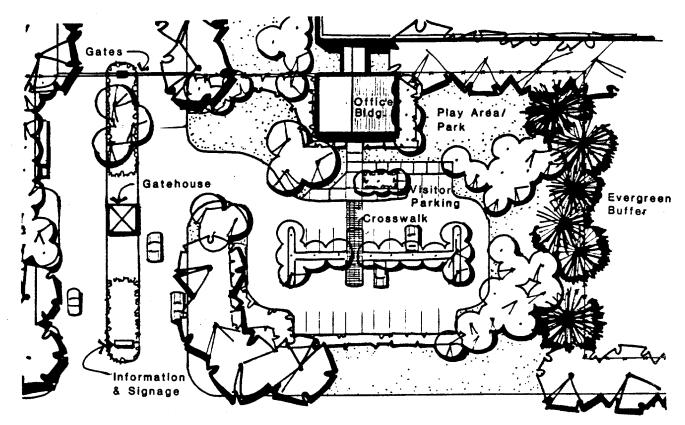
### TYPICAL 90° STANDARD PARKING LAYOUT



STANDARD CURB AND GUTTER

AR LA CE ME SE EE

## OFF STREET SURFACE PARKING SHEET 2/2



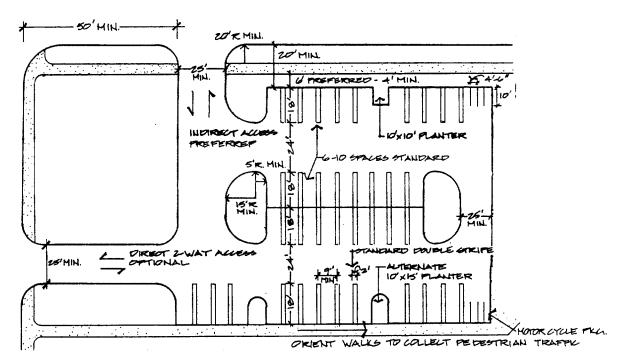
TYPICAL ENTRY TREATMENT



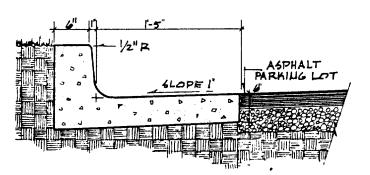
TEMPORARY PARKING EDGE/CURB

3.3.4 os

OFF STREET SURFACE PARKING SHEET 1/2



TYPICAL 90° STANDARD PARKING LAYOUT



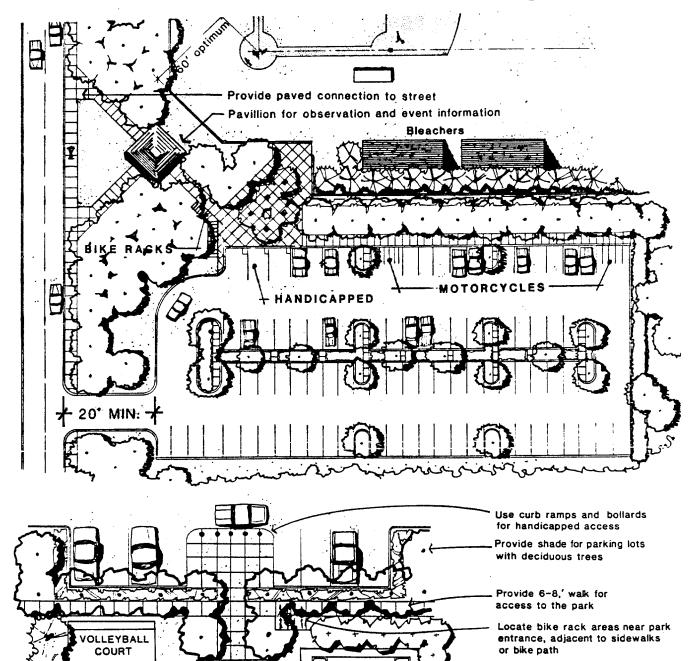
STANDARD CURB AND GUTTER



TEMPORARY PARKING EDGE/CURB



### OFF STREET SURFACE PARKING SHEET 2/2

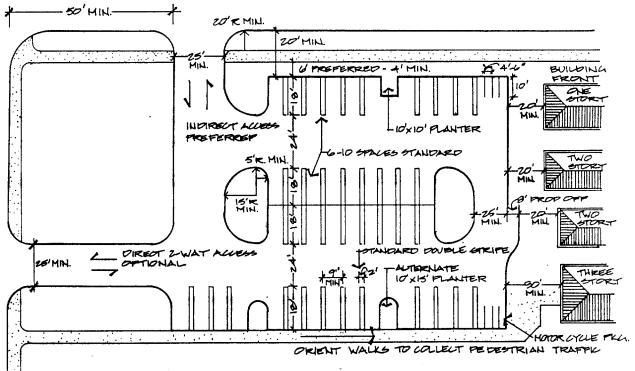


TYPICAL ENTRY TREATMENT

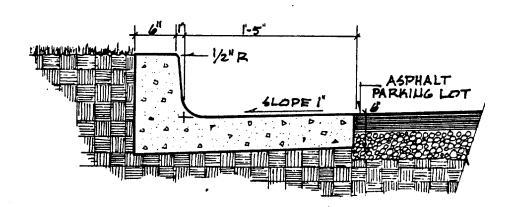
3.3.5

AR LA CE ME SE EE

## OFF STREET SURFACE PARKING SHEET 1/2



TYPICAL 90° STANDARD PARKING LAYOUT



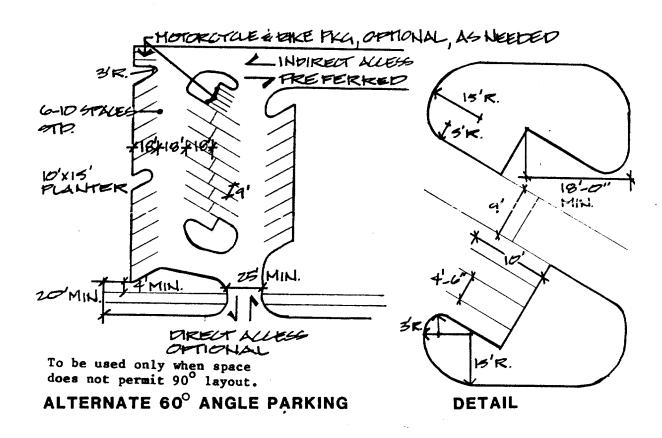
STANDARD CURB AND GUTTER

AR LA CE ME SE EE

### OFF STREET SURFACE PARKING SHEET 2/2



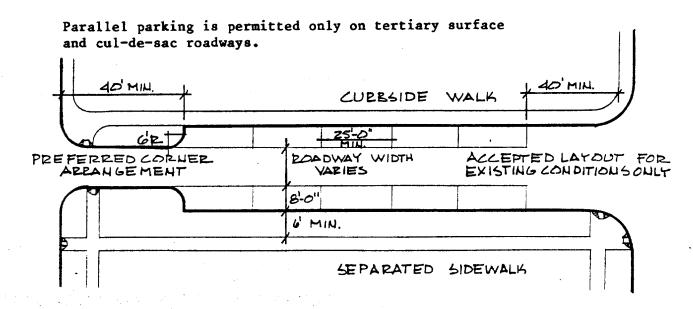
#### TEMPORARY PARKING EDGE/CURB



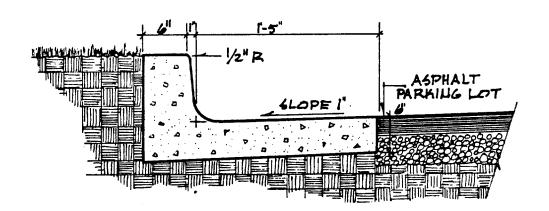
3.4.1 ADM, CF, MS, OS, IND

AR LA CE ME SE EE

#### ON STREET PARALLEL PARKING



#### TYPICAL PARALLEL PARKING LAYOUT

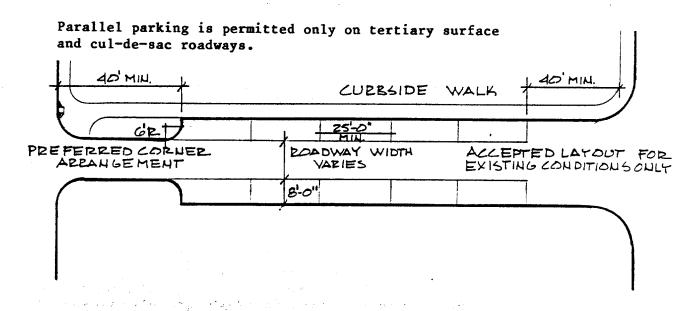


STANDARD CURB AND GUTTER

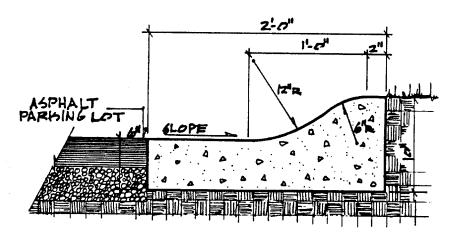
3.4.2

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### ON STREET PARALLEL PARKING



#### TYPICAL PARALLEL PARKING LAYOUT

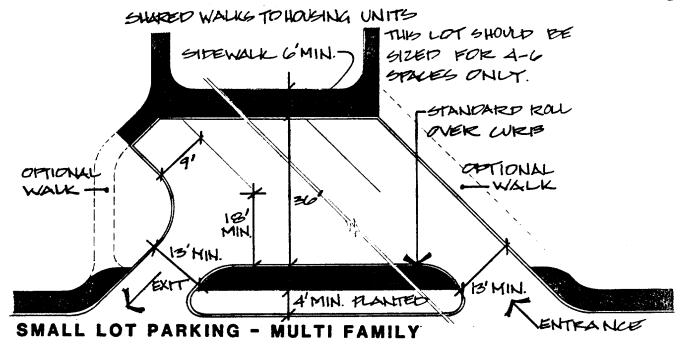


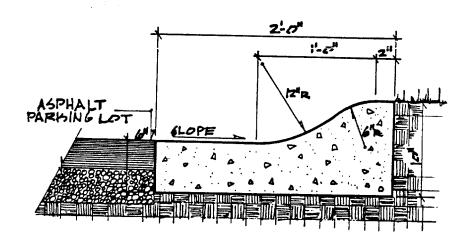
STANDARD ROLL OVER CURB

AR LA CE ME SE EE

RESIDENTIAL DRIVEWAYS

SHEET 1/3





STANDARD ROLL OVER CURB

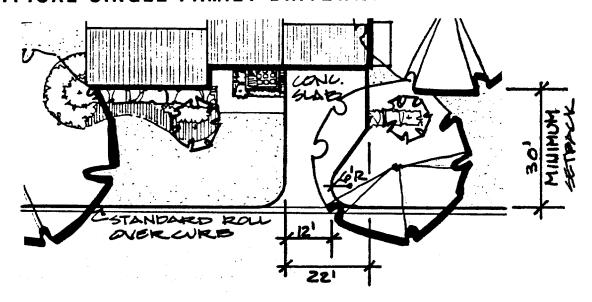
3.5.1

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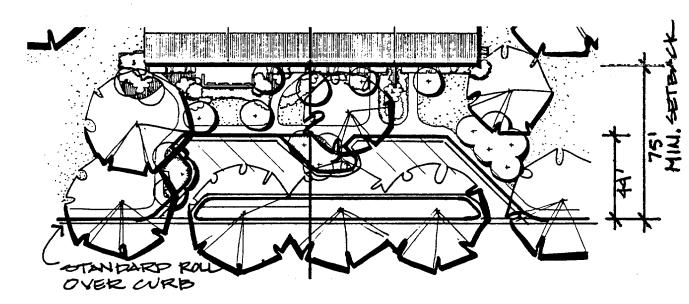
RESIDENTIAL DRIVEWAYS

SHEET 2/3

TYPICAL SINGLE FAMILY DRIVEWAY



TYPICAL SMALL LOT GROUP ARRANGEMENT



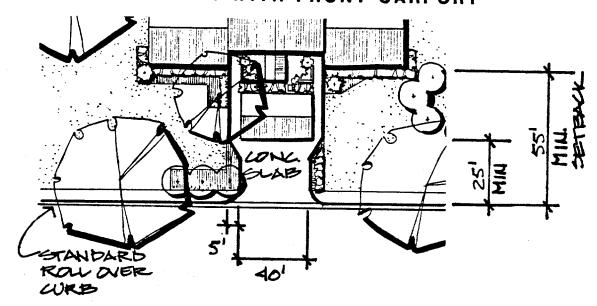
3.5.1

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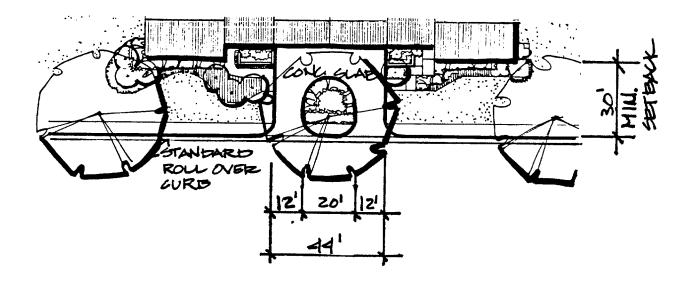
RESIDENTIAL DRIVEWAYS

SHEET 3/3

TYPICAL DUPLEX DRIVE WITH FRONT CARPORT



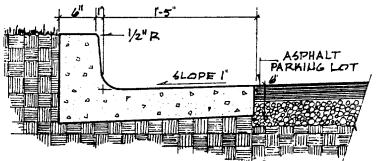
#### TYPICAL DUPLEX DRIVE WITH SIDE CARPORT



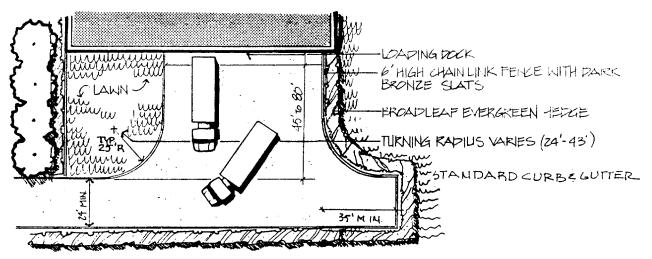
3.6.1 ADM, CF, MS, OS, IND

AR LA CE ME SE EE

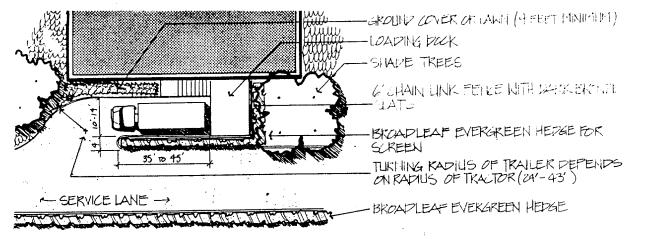
#### **LOADING DOCKS**



#### STANDARD CURB AND GUTTER



#### TYPICAL SERVICE AREA



ALTERNATE SERVICE AREA

3.7.1 ADM, CF, MS, HSG, OS, IND

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#### LANDSCAPING

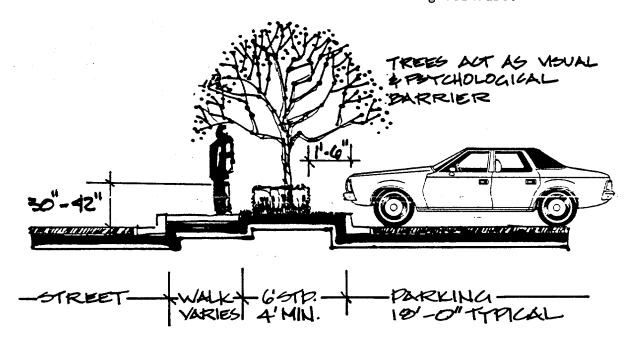
SHEET 1/5

All group parking areas are to be landscaped in an appropriate manner for the adjacent land use.

All lots in Administrative, Community Facility and Open Space Zones will be screened through the use of landscaping, berms low walls or any combination of these, to a height of from (30) thirty inches to forty-two (42) inches. The additional use of trees, properly spaced is also required.

Similar treatment is required for headquarters areas in Industrial and Mission Support Zones and at all group parking areas (6 cars more) in Housing Zones.

Lots are to be separated from walks and streets by landscape strips. Minimum buffers are to be 4' wide with a desired 6' width being standard.



All other parking areas on Post are to be well defined by an established turf cover and regularly spaced trees.

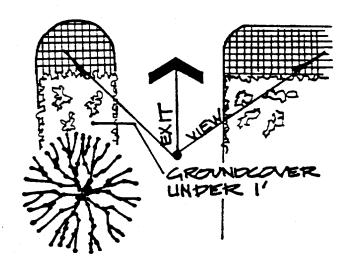
3.7.1 ADM, CF, MS, HSG, OS, IND

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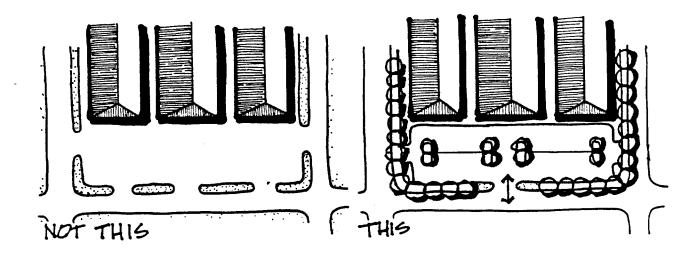
#### **LANDSCAPING**

SHEET 2/5

Parking areas to be screened architecturally or by landscape materials should avoid blocking drivers' views at points of exit from the lots.



Clear points of entry are to be identified through the use of landscape materials.

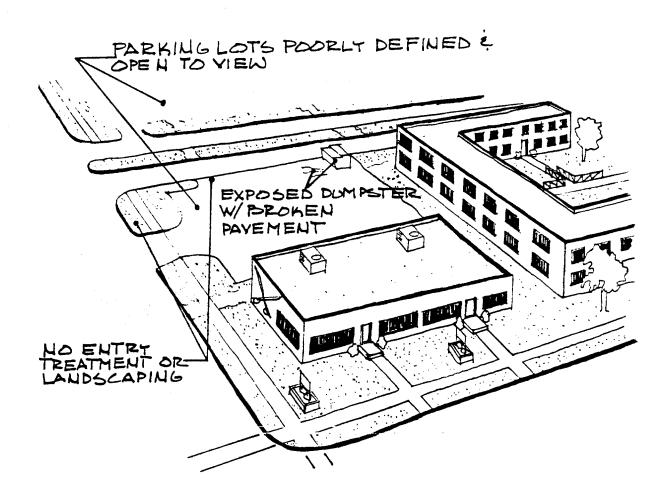


ADM, CF, MS, HSG, OS, IND

SE CE

LANDSCAPING

SHEET 3/5



Typical existing lots are poorly landscaped and not adequately defined.

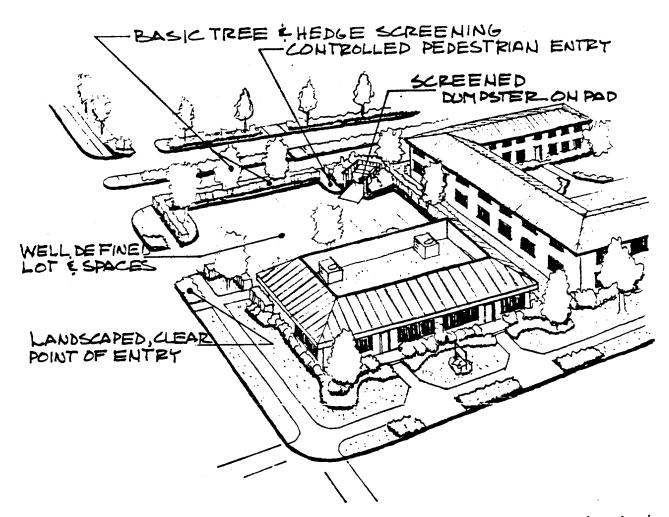
TYPICAL EXISTING PARKING LOT TREATMENT

3.7.1 ADM, CF, MS, HSG, OS, IND

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**LANDSCAPING** 

SHEET 4/5

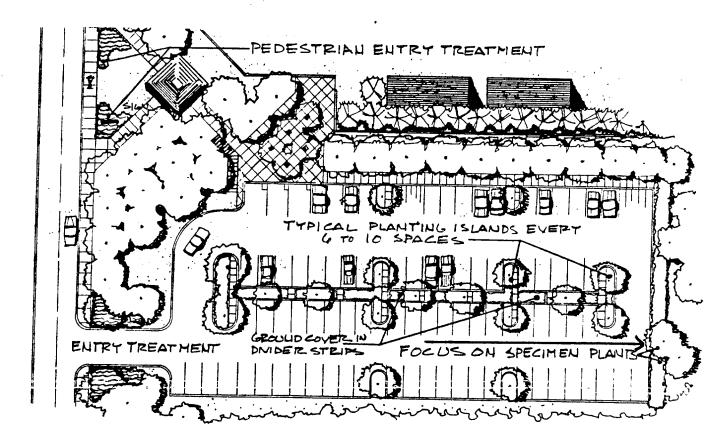


All new lots and those areas undergoing renovation are to receive basic treatment as shown, with ten (10) percent of the total parking area being reserved for turf and other landscape treatment.

INTENDED PARKING LOT TREATMENT

3.7.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE LANDSCAPING SHEET 5/5



High visibility areas such as the commissary/exchange complex, active use recreation centers, or major entrances to the Post are to receive the most intense levels of landscape treatment.

Islands and landscaped buffer strips should have a regenerating ground cover plant material established where possible, in lieu of static mulches that require periodic replacement and can escape the beds.

## DESIGN ELEMENTS MATRIX

4. Landscaping

General Information
Plant material/Trees

Plant Materil/Shrubs

Street & Shade Trees

Screening Erosion Control

Reforestation

Irrigation

Pruning

Staking

Edging

Lawn

Entry Planting

Foundaion Planting

Pedestrian Control

Protection & Clearing

Outdoor Lounge Areas

7.

8.

9.

10.

11.

12. 13.

14.

15.

16.

17.

18.

Plant Material/Groundcovers

LAND USE ZONE DISCIPLINE S S S E SE CE 3 2 1

4.1.1 ADM, CF, MS, HSG, OS, IND

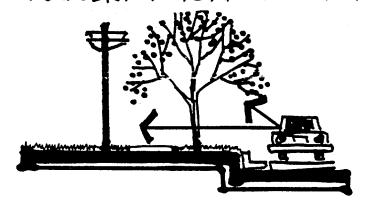
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		DALATION		4/8

#### **GENERAL INFORMATION**

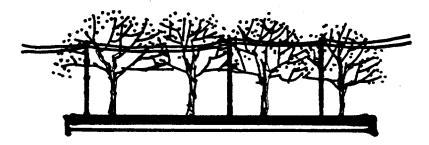
SHEET 1/5

The overall objectives of planting are to improve the physical and psychological well-being of people who live and work on Post. Existing trees, forest lands and plantings are important resources and visual assets that should be carefully preserved and enhanced for functional as well as aesthetic uses. The designer should strive to harmoniously blend the built with the natural environment, provide scale and comfort to pedestrian environs, visually reinforce the hierarchy of the road network; screen unsightly views or elements; and buffer incompatible land uses. The designer should make better use of plant material to improve environmental quality and energy conservation. Proper detailing and plant selection will minimize maintenance requirements.

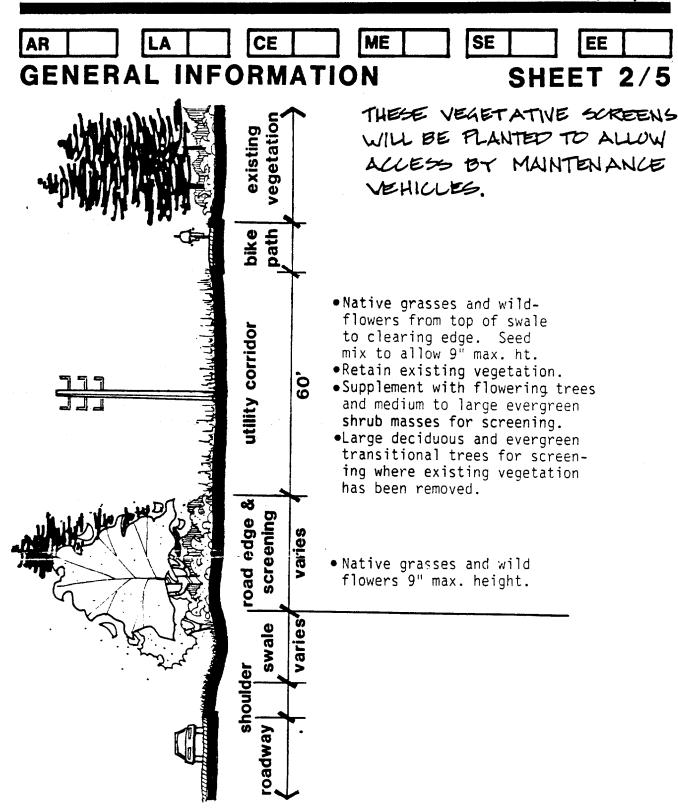
- WHEN LANDSCAPING IN AREAS WHERE TWO DIFFERENT LAND USES ABOUT, THE EDGE OF THE ZONE THAT REQUIRES LESS LAND SCAPING WILL RECEIVE THE HIGHER LEVEL OF TREATMENT.
- DUILDINGS. IF TREES MUST BE PLANTED NEAR LINES WEAK-WOODED VARIETIES WILL BE AVOIDED.
- \* ALL OVERHEAD UTILITY CORRIDORS WILL BE SCREENED ADJACENT TO ROADS AND DEVELOPED AREAS.



THIS IS THE SIMPLEST FORM OF SCREENING. UTILITIES ARE NOT HIDDEN - BUT BLEND IN WITH THE TREES.



4.1.1 ADM, CF, MS, HSG, OS, IND



4.7.7 ADM, CF, MS, HSG, OS, IND

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#### GENERAL INFORMATION

SHEET 3/5

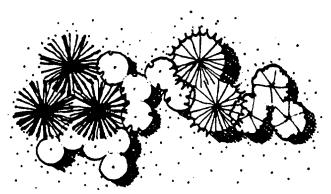
Shrubs should be planted at least 2 feet from buildings. Small trees should be planted at least 8 feet from buildings. And large trees should not be planted closer than 20' to any building.

Generally, it is better to plant dwarf varieties of shrubs in front of windows rather than attempt to keep a shrub low by frequent pruning. Taller plants should be used at corners or around entrances to add emphasis.

The color of flowers or berries or fall foliage should not clash with the color of the building or other plants in the same composition. When choosing a blooming plant for color accent, remember that for most of the year the plant will not be in bloom. Therefore, the plant must have sufficient character when not in bloom to justify its use.

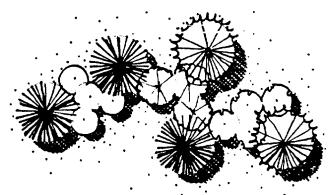
Spacing of plants should be detemined by the mature spread of the plant instead of the size of the plant when planted. Don't over plant!

There should be a balance between evergreen and deciduous plant material. Evergreens provide green color year round and are effective in blocking views and providing a backdrop against which altering deciduous plants can be compared. Deciduous plants add excitement and interest to a composition because they indicate the changing of the seasons. Deciduous plants are best used with evergreens in a composition.



#### THIS

EVERGREENS ARE CLUSTERED TOGETHER TO UNIFY COMPOSITION.



#### NOT THIS

EVERGREENS ARE TOO SCATTERED AND THEREFORE VISUALLY BREAK UP COMPOSITION.

4.1.1 ADM, CF, MS, HSG, OS, IND

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#### **GENERAL INFORMATION**

SHEET 4/5

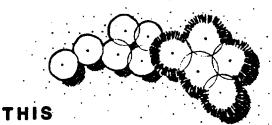
Plants usually look better when massed than when used alone. When groups of seven or less are used, odd numbers of plants make the most pleasing masses.

Groups or clusters of plant materials should also be visually connected to avoid wasted space between them. This wasted space causes the composition to appear disjointed and is likely to increase maintenance.

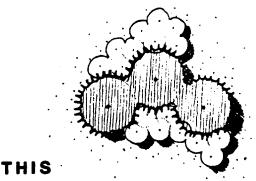


THIS

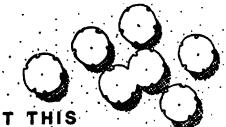
INDIVIDUAL PLANTS IN COMPOSI-TION ARE MASSED TOGETHER



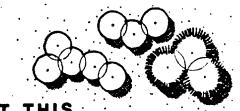
SEPARATE PLANT GROUPS ARE MASSED TOGETHER, AVOIDING WASTED SPACE.



SMALL SHRUBS ARE PROPERLY MASSED IN LARGER GROUPS. WORKS WELL IN BEDS.

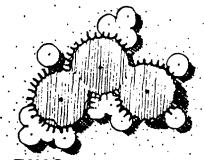


INDIVIDUAL PLANTS IN COMPOSI-TION ARE SCATTERED & SPOTTY, INCREASES MAINTENANCE



NOT THIS

WASTED SPACE CREATED BE-TWEEN SEPARATE PLANT GROUPS, INCREAGES MAINTENANCE.



NOT THIS

SMALL SHRUBS PLACED IN TOO MANY SEPARATE GROUPS.

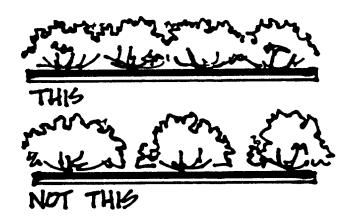
4.1.1 ADM, CF, MS, HSG, OS, IND

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#### GENERAL INFORMATION

SHEET 5/6

\* THE TRIMMING OF SHRUBS SHOULD FOLLOW THE NATURAL LINE AND FORM OF THE PLANT, SEVERELY STRUCTURED SHAPES WILL BE AVOIDED. FLANTINGS WILL BE ALLOWED TO GROW TOGETHER AND READ AS A MASS INSTEAD OF SINGLE SHRUBS.



SINGLE HEDGE GIVES
TORECTION & FORM

INDIVIDUAL PLANTS REQUIRE INCREASED MAINTENANCE.

- \* ALL PLANTS WILL RECEIVE THREE INCHES OF MULCH THAT SHOULD ENTIRELT COVER THE AREA OF THE FLANTING PIT, BED, OR GAVIER AROUND EACH PLANT. RECAN SHELLS, PINE BARK MULCH, AND OR PINE STRAW ARE PERMITTED MULCHES.
- "ALL ROOF BRAINS THROUGHOUT POST WHICH ARE NOT PIPED UNDERGROUND WILL HAVE GPLASH BLOCKS. THE SPLASH BLOCKS. THE SPLASH BLOCK WILL BE A CONCRETE SET STAINED A DARK BROWN-AMINIMUM OF 12" x 24" x 2".

4.2.1 ADM, CF, MS, IND

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CON	MINISTRATION  MUNITY  CILITIES	СОММОИ	Boxelder	Red Maple	Red Buckeye	River Birch Pecan	Sugarberry	Hackberry	Dogwood	Hawihorn	Gingko	Possumhaw	American norry Red Cedar	Crape Myrile	Tulip Tree	Magnolia Saucer Magnolia	Crabappie	Sourwood	Shortleaf Pine	Slash Pine	Longleaf Pine	Sycamore	Cherry Laurel	Black Cherry White Oak	Scarlet Oak
SUP	SION PORT USTRIAL	BOTANICAL	Acer negundo	Acer rubrum	Acer saccinatum Aesculus pavia	Betula nigra		Celtis occidentalis	Cornus Horida	Crataegus marshallii	Gingko biloba	Hex decidua	llex opaca Juniperus virginiana	Lagerstroemia indica	Liriodendron tulipilera	Magnotia grandiffora	2 6	Nyssa sylvatica		Pinus elliottii	Pinus palustris	Prinus taeda	Prunus caroliniana	Prunus serotina	Querous coccinea
DESCRIPTION	Group: Evergreen  Deciduous  Growth rate: Fast  Moderate Slow  Texture: Coarse  Medium Fine Flowering: Yes  Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping					0 (						•		0				0 (		•	0 0			0 (	
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low				•	0						0			•		_	•		0	0	•		•	
USE	Environmental: Erosion Shade Transitional/Na Visual: Street Trees Ornamental Screen-Tall Screen-Low				•	0				•		•	0 0	•				•	•		•	0	•		• •

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PL	ANT MATE	RIA	AL/TREES SHEET	2
APF	PLICABLE			
CON	MINISTRATION MMUNITY CILITIES SION	COMMON	Southern Red Water Oak Pin Oak Willow Oak Post Oak Sassafras Black Willow Zelkova	
SUP	PORT	BOTANICAL	Ouercus falcata Ouercus migra Ouercus palustris Ouercus phellos Ouercus stellata Ouercus virginiana Sasafras albidum Salix nigra Salix nigra Zelkova sefrata	
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Gpreading Weeping			
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	Hìgh		
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		

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		COM		Boxelder	Red Maple Sugar Maple	Red Buckeye	Pecan	Sugarberry	Hackberry	Hedbud	Hawthorn	Persimmon	Gingko	erica	Red Cedar	Crape Myrtle	Sweetgum Tulio Tree	Magnolia	ucer	Crabapple	Sourmond	2011	Slash Pine	nglea	bioliy	Sycamore	Cherry Laure	White Oak	Scarlet Oak
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		OTA		unde	ubrur	d sn	100	laevi	occie	cana	Sons	yros	bile	oaca	rus	stroer	amba	0	lia s	Horit	Sylve		a line	palus	taeda	10 SU	Scar	us alt	us co
		m		Acer negundo	Acer rubrum Acer saccharum	Aesculus pavia	Betula nigra	Celtis laevigata	Celtis occidentalis	Cercis canadensis	Crataegus marshallii	Diospyros virginiana	Gingko biloba	The x obaca	Juniperus virginiana	Lagerstroemia indica	pinbi	Magoolia orandiflora	Magnolia soulangeana	Malus floribunda	Nyssa sylvalica	) x y de	Pinus ecimala	Pinus palustris	Pinus taeda	Jatar	Prunus caroliniana	Overcus alba	Ouercus coccinea
	Group: Evergreen	<u> </u>													•										•		•		
	Deciduous Growth rate: Fast			•	•			•	•			ĕ				•									•	•			Ĭ
	Moderate Slow		1		•								•								-	•		1	1			ie	•
Z	Texture: Coarse Medium	<del></del>	ł		9	•				٠,	-			-	1		9												•
DESCRIPTION	Fine		1							Ť					•			1			Ĭ			Ī	Ĭ			I	+
₫	Flowering: Yes		1		•		+	+	$\vdash$	9		<u> </u>		+	+	•	4				$\dashv$	+		+	╁	H		•	+
2	Form: Horizontal Rounded		1		• 6		-			-	1	-	-		+-	•	-	+	+	•	١,	•	+					•	
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۵	Pyramidal		1		•		$\top$				1	•	•	1					•	Н	_	4	4	•		$\vdash$	H	+	+
	Columnar Irregular		1						+	-					-	•	-	┪			•	•	+	+	+	•	•	•	+
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	Spreading					•	•	DO	•	•	Ð		.	9	<b>.</b>	•			1	•	_	-		+	4	9	•		9
	Weeping Exposure: Sun		╄	╁							+				+			١,										•	
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	Shade	111.5	1							•		Ţ	П	Τ,				1					1	4	1				<u> </u>
끭	Moisture Requirement: Medium	High	1						18	•				•	3	+=						3	•						2
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CULTURE	Well-drained Pest/Disease: Subject		-		•	+-			┼		#		1	910														•	7
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ŀ	Soil Fertility: High		-	L		-								_ (				_	9									8	
ļ	Medium Low		1	۲					-	3	#	10		3		H	5	<u> </u>			ĕ		-						
	Environmental: Erosion		丁	•	•	Ĭ	•		•	•				•	Ť	Ĭ	Ŏ		I	Ĭ	•			•	•	Į		•	I
1	Shade		-					•							0 4		•		+	+-			•			#			
USE	Transitional/Na Visual: Street Trees	iuiai	1	1													•	•	$\perp$	$\pm$							4-4		01
ت ا	Ornamental		-]	F	•	•	•	1	F	•	•	9		•	9 (		4	-	•		•	$\vdash$				+	8	-	+
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PL.	ANT MATE	RIA	AL/TREES	SHEET 2
APP	LICABLE			
HOU	SING	COMMON	Southern Red Water Oak Pin Oak Willow Oak Post Oak Live Oak Sassafras Black Willow Zelkova	
		BOTANICAL	Ouercus falcata Ouercus nigra Ouercus palustris Ouercus phelios Ouercus stellata Ouercus virginiana Sassafras albidum Salix nigra Zelkova serrata	
DESCRIPTION	Group: Evergreen  Deciduous  Growth rate: Fast  Moderate  Slow  Texture: Coarse  Medium  Fine  Flowering: Yes  Form: Horizontal  Rounded  Oval  Pyramidal  Columnar  Irregular  Upright  Spreading  Weeping			
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High		
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		

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PL	ANT MATE	RIA	L	/	T	R	E	E	S	•											(	S	H	łE		E	T	-	1
АРІ	PLICABLE		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•		•	•	•	•				•	•	•
OPE	N SPACE	COMMON	Boxelder	Red Maple	Sugar Maple	River Birch	Pecan	Sugarberry	Redbud	Dogwood	Hawthorn	Persimmon	Possumhaw	American Holly	Red Cedar	Sweetaum	Tulip Tree	Magnolia	Saucer Magnotta	Blackgum	Sourwood	Shortleaf Pine	Slash Pine	Longleaf Pine	Copiolity Pilie	Cherry Laure	Black Cherry	White Oak	Scarlet Oak
	,	BOTANICAL	Acer negundo	Acer rubrum	Acer saccharum	Betula nigra	Carya illinoensis	Celtis laevigata	Cercis canadensis	Cornus Horida	Crataegus marshallii	Diospyros virginiana	Hex decidua	llex opaca	Juniperus virginiana	Lagerstroemia indica	Liriodendron tulipitera	Magnolia grandillora	Magnolia soulangeana	Nyssa sylvalica	Oxydendrum arboreum	Pinus echinata	Pinus ettiottii	Pinus patustris	Pinus laeda	Platanus occidentalis	Prunus serotina	Ouercus alba	Overcus coccinea
DESCRIPTION	Group: Evergreen  Deciduous  Growth rate: Fast  Moderate Slow  Texture: Coarse  Medium Fine Flowering: Yes  Form: Horizontal			•			•			•	•			•	•			•			•	•	•	•				•	•
DESC	Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping					•	•	9 9		•	•	•	•	•	•	•	•	•	9		•	9	•	•		•		) •	3
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High												• • • • • • • • • • • • • • • • • • • •			0	$\Box$	0 (		1	•	•	•	Ĭ			•	•
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		Ò	•		•	• •		•	•	•		_	•							•		•	0	•		0	Ĭ

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PL	ANT MATE	RIA	AL/TREES	SHEET 2
APP	PLICABLE			
OPE	N SPACE	COMMON	Southern Red Water Oak Pin Oak Willow Oak Post Oak Live Oak Sassafras Black Willow Zelkova	
	,	BOTANICAL	Ouercus falcata Ouercus nigra Ouercus palustris Ouercus phellos Ouercus stellata Ouercus virginiana Sassafras albidum Sassafras albidum Salix nigra Zelkova serrata	
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping			
CULTURE	Exposure: Sun  Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High		
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		

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		MMUNITY	COMMON		6	977	poo	. E	Spra	Shus	ng B	en Be		ese	Ĭ	989	H UO	e .	erle	Mahonia	Puly Pood	Oran	Sh L	anın	Sant		a la
		CILITIES	ŏ		Abelia	Azalea Barberry	Boxwood	Cleyera	Rockspray	Elaeagnus	Burning Bush	Golden	Burlord Holly Chinese Holly	Japanese Holly	Helleri Holly	Japanese Holly	Yaupon Holly	Juniper	Leatherleaf	Mah	Heavenly Bamboo	Mock Orange	English Laurel	Fyracantha	Gray Santolina	Spirea	Weigelia
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			Å.				Buxus sempervirens				nana		cornuta burtordi	convexa	leri		nana				ca	Philadelphus virginalis	Sus		chamaecyparissus		
			BOTANICAL				perv	Cleyera japonica	GS .		Euonymus alatus		cornuta burtordi	COL	crenata helleri	crenata microphylla	llex vomitoria	Sp.	9 6		Nandina domestica	SVIF	Prunus laurocerasus	Sp.	сура		ida
			OTA		Ġ	is sp	sem	a jap	aster	Sild	B SUL	ia s	rout	crenata	enat	crenata	omit.	S SN.	a be		a do	1 bhu	laur	ntha ea	ашав	Sp.	a Hori
			8		Abelia sp	Azalea sp. Berberis sp	Buxus	eyer	Cotoneaster sp.	Flaeagnus sp.	nonym	Forsythia sp.	Hex co	llex cr	)× C	E C	> ×	Juniperus	Mahonia bealet		ndin	Hade	nuns	Pyracantha sp	5 5	Spirea sp.	Viburnum sp. Weigela Horida
1	_	Group: Evergreen		H	•		<u>т</u>	) Ü	<u>ن</u> د	S II	Ш	<u>ا</u>			¥ 6 1 1 € X		=	<b>-</b>	ž	4	ž	4	ات	7 %		S	>   <b>&gt;</b>
		Deciduous Growth rate: Fast				•			•		•	•				1				$\square$	-	•			$\Box$	•	•
7	• •	Moderate			9	90		•			•		Ĭ	•						П	•	•	•		山		•
	2	Slow Texture: Coarse			$\exists$			$\perp$					•									Н	•	+	+		•
	DESCRIPTION	Medium Fine					•	•			•	•	9 0	•	•					$\Box$	•	•	•			•	
	<u>.</u>	Flowering: Yes			Ō		Ĭ					•	士									•	$\perp$				• •
	SC	Form: Horizontal Rounded				•		+			H	$\dashv$	-		•	•	$\vdash$	•	+	-		$\vdash$	$\vdash$	+	+		+
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	-	Pyramidal Columnar			H	+-	╁┼	+	╁┼	+	+	-	+	+	H	+	H	-	+	+	+	H	$\dashv$	+	4-4	$\vdash$	++
		irregular						1		#		•	#	1		$^{+}$		1	1		士		٠	9	$\pm$		
		Upright Spreading		l	Н			<u>}</u>		+	•	$\dashv$	•	-							•	H	•	٠,		•	
		Weeping			H					ē		•													1	T'	
		Exposure: Sun Semi-shade			9	•	•		•			•	•		•	•	•	9	4		•	•	•	9 4		•	
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	끭	Moisture Requirement: Medium	High			•				+			• •				9	-							+		9
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	"	Not Subject Soil Fertility: High		1	•	•	-					•	•	_	•		•	•	Ŧ	П	•	•		•		$\overline{}$	
		Medium		1	•			0				•	•				•				•	•	•	•	1	-	
	<b>—</b>	Low Environmental: Erosion		-	H	4	$\prod$	+	-	4		$\vdash$		1	H		$\Box$	•	Ļ		I	-	Į		4	$\coprod$	$\Box$
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	SE SE	Transitional/Nat Visual: Street Trees	ural	ł	H	•	+-		H	4	•	$\vdash$	$\bot$	+	$\Box$	-	$\Box$	$\dashv$	+	H	+	-	H	1	Ŧ	•	#
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	LICABLE						•																		
CON	IINISTRATION IMUNITY ILITIES	COMMON			Wort	Вауреггу	Red Tip	Noodlo																	
		BOTANICAL		e C	patulum	pensylvanica	nia glabra	0												- Constant					
DESCRIPTION	Group: Evergreen  Deciduous  Growth rate: Fast  Moderate Slow  Texture: Coarse  Medium Fine Flowering: Yes  Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping							•																	
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low				0			•																	
USE	Environmental: Erosion Shade Transitional/Na Visual: Street Trees Ornamental Screen-Tall							•						+											

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۲	IOL	JSING	COMMON		Abelia	Azalea Barberry	Boxwood	Quince	Rockspray	Siender Deutzi	Burning Bush	Golden Bells	Burford Holly Chinese Holly	Japanese Holly	Helleri Holly	alloll encount	Yaupon Holly	Juniper	Privet	Leatherleaf	Mahonia	Bamboo	Mock Orange	English Laurel	Pyracantha		Gray Santolina	Spirea	Viburnum
			BOTANICAL		Abelia sp.	Azalea sp. Berberis sp.	Buxus sempervirens	Chaenomeles japonica Clavera japonica	Cotoneaster sp.	Deutzia gracilis	Elaeagnus sp.	Forsythia sp.	Hex cornuta burtordi	llex crenata convexa	llex crenata helleri	llex crenata	Hex vomitoria nana	Juniperus sp.	Ligustrum sp.	Mahonia bealei		Nandina domestica	Philadelphus virginalis	_		Santolina	chamaecyparissus	Spirea sp.	Viburnum sp.
		Group: Evergreen Deciduous			•	•	•	•	•	•	•	•	• •	•	•	•	•	-	•	•			•	•	•	•		•	
	İ	Growth rate: Fast Moderate Slow			•	•		•					•••	•	•			•		•	-		<b>†</b>	•		•	$\vdash$		9
١	N O	Texture: Coarse Medium		•			Ĺ	•		•	•	•	• •			1		F	•		$\dashv$	$\pm$	-	•					Đ
1	DESCRIPTION	Fine Flowering: Yes			0	•	•	•	•	•	$\pm$	•	$\pm$	•	•	•	•	•	•	•		•			$oxed{\Box}$	•		•	ē
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ļ		Columnar Irregular					T		H	-	Ŧ		_	ļ.	-		-	F		-		1						-	
١		Upright Spreading		1	Ė	•	•	9	•		•	П	•		•				•	•	-	•	Ŧ	•	1	•		•	-
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ı		Exposure: Sun Semi-shade		1				-			• •			P	•	•		_	•	-	1				ě				
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		Not Subject Soil Fertility: High		1											•	•		I					Ĭ			Ĭ			
		Medium Low		Ŀ	-					6									_	•		•		1		•		•	2
1		Environmental: Erosion Shade	•	1	F		+	Η,	•		+	F		Ŧ	F	Н	7	1	1	-		-	+		Ŧ	Ŧ	F	F	ŀ
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	USE	Transitional/Na Visual: Street Trees Ornamental	itural	1			士		$\pm$	•				土			士			•	$\Box$		士		土		工	•	<del>-</del>

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PL	Αl	NT MATER	IA	L/SHRUBS SHEET 2/	<b>'2</b>
	AP	PLICABLE			
	но	USING	COMMON	Pampas Grass St. John's World Bayberry Adam's Needle	
			BOTANICAL	Sa Sa Sa	
	DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar irreguiar Upright Spreading Weeping			
	CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High		
	USE	Environmental: Erosion Shade Transitional/Natu Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		

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API	PLICABLE								•	•	•		•	•	•	•	•	•	•			•							•	•
IND	USTRIAL	COMMON		Abelia	Azalea	Barberry	Quince	Cleyera	Slender Deutzia	Elaeagnus	Burning Bush	Golden Bells	Chinese Holly	Japanese Holly	Helleri Holly	Language Hotter	Yaupon Holly	Juniper	/e1	Leatherleaf	Mahonia	Heavenly	Bamboo	Mock Orange	Puracantha	acantha	Gray Santolina	rea	Viburnnum	Weinelia
				Abe	AZ	T	11	0	SIS	Ela	nana' Bur		T		Ŧ	1	T	T	Privet	Lea	₹	Hea		_			Ì		Λib	W
•		BOTANICAL		Abelia sp.	Azalea sp.	Berberis sp.	Chaenomeles japonica	Cleyera japonica	Cotoneasier sp. Deutzia gracilis	Elaeagnus sp.	atus	Forsythia sp.	Hex cornuta rotunda	llex crenata convexa	ilex crenata helleri	llex crenata	Hex vomitoria nana	Juniperus sp.	Ligustrum sp.	Mahonia bealei		Nandina domestica		Philadelphus virginalis	Prunus Taurocerasus	Pyracamina sp.	chamaecyparissus	Spirea sp.	Viburnum sp.	Moinela Harida
	Group: Evergreen Deciduous	<u> </u>	<b> </b>	•	0			•		•			•	•	•		•	-	÷	•		•		_			<u>"</u>	L	•	_
	Growth rate: Fast Moderate Slow Texture: Coarse			•	•	•		•	•	•	•		•	•	•	•	•	•	•	•		•		•				•	•	_
DESCRIPTION	Medium Fine Flowering: Yes Form: Horizontal Rounded			99	•		•	•		•	•	• (		•	•			•	•	•		•		•				•	•	
DES	Oval Pyramidal Columnar Irregular				3			•				٥													• •					++-
	Upright Spreading Weeping Exposure: Sun Semi-shade			•	•		•		•	000	•	•		•	•	•			•	•		•						•	•	
CULTURE	Shade Moisture Requirement: Medium Low	High			•	•	•			•		•		Ĺ	•	•			•	•		•			•			•	•	-
CULT	Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium			•	•		) Q	•	•	•	•	•		•	•				•	•		•		•		•		I		Ĺ
	Low Environmental: Erosion Shade Transitional/Na		<u> </u>	E	•			•	_	•															•	-				-
USE	Visual: Street Trees Ornamental Screen-Tall Screen-Low				•	≖+-		•	•	oxdot	•	•	•						•	•		•			•	• (	•	•	•	

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АР	PLICABLE			I				•	•																				1	
IND	USTRIAL	COMMON		Damnae Grass	St. John's	Wort	Bayberry	Red Tip	Adam's	Needle																				
		BOTANICAL		Cortaderia selloana	Hypericum patulum		Myrica pensylvanica	Photinia glabra	Yucca filamentosa																					
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar irregular Upright Spreading Weeping			000			•	•	•																					
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High		0 000 00	•		•	•																						
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		E	•		•	•	•																					

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API	PLICABLE			•	•	•	•	•	•	•	•		•	•			•	•			•		•	•	•	•		•	
OPE	EN SPACE	COMMON		Abelia	Azalea	Barberry	Quince	Cleyera	Hockspray Slender Deutzia	Elaeagnus	Burning Bush	Burford Holly	Chinese Holly	Japanese Holly	Helleri Holly	Japanese Holly	Yaupon Holly	Juniper	Privet	Mahonia	Heaventy	Bamboo	Mock Orange	English Laurel	Pyracantha		Gray Santolina	Viburnum	
	·	BOTANICAL		Abelia sp.	Azalea sp.	Berberis sp.	Chaenomeles iaponica	Cleyera japonica	Cotoneaster sp. Deutzia gracitis		Euonymus alatus nana	flox cornuta burfordi	llex cornula rotunda	llex crenata convexa	llex crenata netteri	microphylla	llex vomitoria nana	Juniperus sp.	Ligustrum sp.	Manoria Dealei	Nandina domestica		Philadelphus virginalis		Pyracantha sp.	Santolina	chamaecyparissus	80	
NO	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium			•	•		•	•		•			•	•			•	•			•		•	•	•	•			
DESCRIPTION	Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal			00	•	•	•			•			•		9 (		•	•			•		•			•			İ
	Columnar Irregular Upright Spreading Weeping Exposure: Sun				•		0	•	•	0 0	•		•				Ĺ	•	•		•		ê	Ú O	3	•			
CULTURE	Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject	High			•		•	•	9 9	•	0		•	•		•		•	•		•	)	•		•				
USE	Soil Fertility: High Medium Low Environmental: Erosion Shade Transitional/Nat Visual: Street Trees	ural	-	•	•		•	•	•	•							•	•			•			•	-	•			
	Ornamental Screen-Tall Screen-Low				•		-	•	•	•	•	-			+	+	•		•		-		•	•	•		1		-

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АР	PLICABLE			•		•	•																	
OPE	EN SPACE	COMMON		Pampas Grass	Wort	Ваубеггу	Red Tip	A Daga																
	·	BOTANICAL		Cortaderia selloana		Myrica pensylvanica	inia glabra	,										A STATE OF THE STA						
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar !rregular Upright Spreading Weeping					•	•	D																
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low					• • • • • • • •																		
USE	Environmental: Erosion Shade Transitional/Na Visual: Street Trees Ornamental Screen-Tall Screen-Low			•		•																		

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PL	ΑI	NT MATER	IA	L	/	•	3	H	F	ł	j	В	S	•							S	H	E		E	7	Γ	•	1	/	4
	API	PLICABLE			•				•	•	•		•	•	•	•		•	•	•					•	•	•		•	Þ	
		SSION	COMMON		Abelia	Azalea	Barberry	Quince	Cleyera	Rockspray	Elaeagnus	Burning Bush	Golden Bells	Chinese Holly	Japanese Holly	Helleri Holly	Lich organia	Yaupon Holly	Juniper	Privel	Leatherleaf	Mahonia	Ramboo	Mock Orange	English Laurel	Pyracantha		Gray Santolina	Spirea	Viburnum	nichter.
			BOTANICAL		Abelia sp.	Azafea sp.	Berberis sp.	Chaenomeles labonica		Cotoneaster sp.	Flaggous so.	Euonymus alatus nana	Forsythia sp.	llex cornuta burlordi		llex crenata helleri	llex crenata	liex vomitoria nana	Juniperus sp.	Ligustrum sp.	Mahonia bealei	to domination	Mangina domestica	Philadelphus virginalis	_		Santolina	aecyparissus		Viburnum sp.	
	DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright			•			•	•			•	•		•	•	•	•	+	•	•			•	•	•			• (		
	CULTURE	Spreading Weeping Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium	High		•	•			•			•	•		•	•	•	0	•	•	•			•	•	•	•				Ī
	USE	Low Environmental: Erosion Shade Transitional/Nate Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural		$\Box$	•		-+-				•	+	•					•		•			•	•	•	·				

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LA	NT MATER	IA	L/SHRUBS SHEET 2/	/ 2
AF	PPLICABLE			
	SSION PPORT	COMMON	Pampas Grass St. John's Worlt Bayberry Red Tip Adam's Needle	
		BOTANICAL	Sa	
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping			
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High		
USE	Environmental: Erosion Shade Transitional/Nate Visual: Street Trees Ornamental Screen-Tall Screen-Low	ıral		

4.4.1 ADM, CF, MS, HSG

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	Group: Evergreen			√ ▼	Ö		Ĭ	Î.	3 -	ŏ	Pa	>	>	D L	ā	_		_	-	<u> </u>			-		i	_	<u> </u>
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ų	Moisture Requirement:	High		•	•			$\pm$						5	+	+	+	+	+	H	1		!	+	4	1	_
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4.4.1 ADM, CF, MS, HSG

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		COMMON			rumpelcree	alis	arolina Jessamine	y ly	1	in g		2 0	rvine	Rose	ria												1	
FAC	MMUNITY CILITIES	ŏ				Clematis	Carolina	English Ivy	Grape	Climbing		Passion	Silvervine	Banks Rose	Wisteria													
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		AL			previpeduncalara		Gelsemium sempervirens	-				arna	auberti	60										-	!			
	SION PPORT	BOTANICAL		Sis	Campsis radicans	Sp.	u seu	×	i	Rosa hybrida	Parthenocissus	D I C	a a		ď									!	;			
		ВОТ		Ampelopsis	DSIS	Clematis	un in in	Hedera helix	000	hy	enoc	quinqueiona	nuot	ban	ria sp													
				Amp	Cam	Cler	Ciels	Hede	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Rosa	Parin	Passiflora incarnata	Polygonum	Rosa	Wisteria				Ì			į			i			
	Group: Evergreen Deciduous			•				•						•		İ		1	Ť	-		1	+	İ	İ			-
	Growth rate: Fast  Moderate	-		•	-	•		9 (	•	•		+	•	•	•	İ		1	$\dagger$	i			7	$\dagger$	Ŧ	H	<del></del>	-
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μį	Moisture Requirement:	High						•				1		•				_	-				İ	İ	İ			
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4.4.1 ADM, CF, MS, HSG

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-	IT MATERIA	L/	IUKF		ЭП	IEET 3/3
API	PLICABLE					
COA	MINISTRATION MMUNITY CILITIES	COMMON	Carpel Grass Bermudagrass Annual Ryegrass			20% bien- summer and Mixture can 1/or height
MIS	JSING SION PORT	BOTANICAL	Axonopus allinis Cynodon daciylon XX Lolium mullillorum Wildliower Seed Mix *		Tifusy (Tifton 4	40% annuals, e of spring, l2 species. tolerance and
DESCRIPTION	Group: Evergreen  Deciduous Growth rate: Fast  Moderate Slow Texture: Coarse  Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping				de af hermide	seed mixtures to contain perennials with a mixtur ecies using a minimum of ercsion control, shade
CULTURE	Exposure: Sun Semi-shade Shade Moisture Hequirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	High			Or ellite huhr	wildflower als, and 40% als, and 40% adapted fatrictions.
USE	Environmental: Erosion Shade Transitional/Nat Visual: Street Trees Ornamental Screen-Tall Screen-Low	ural			3	

4.4.2 os, IND

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АР	PLICABLE				•		•	•	•	•		•	•	•												
	USTRIAL EN SPACE	COMMON		Carpet Bugle	Carolina	Jessamine	Dayiily	Aaronsbeard	Monkey Grass	Mondo Grass	Japanese Spruge	Periwinkle	Wintercreeper	Thrift												
		BOTANICAL			Gelsemium sempervirens	Hodora en	lis sp.	Hypericum calycinum A		-	sandra terminalis	Vinca minor	Sfortunei	Phlox subtata												
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar !rrogular Upright Spreading Weeping				•						D D															
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low			0 0 0	•	9	0	0	•	•			•	0												
USE	Environmental: Erosion Shade Transitional/Na Visual: Street Trees Ornamental Screen-Tall Screen-Low			•	•		•	•	•	•		•	•	•	-											

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API	PLICABLE			•	•		•	•	•	•	•		•	•		•												
	USTRIAL En Space	COMMON			Ampelopsis	Clematis	Carolina	English fvy	Honeysuckle	Grape	acou filling	Virginia Creeper	Passion Flower	Silvervine	Banks Rose	Wisteria												
•		BOTANICAL		Ampelopsis	Campsis radicans		Gelsemium sempervirens	Hedera helix	sp.		Parthenocissus		t a	erti	Rosa banksiae													
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Coiumnar Irregular Upright Spreading Weeping			•	_	•	•	•						•														
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low			•		0	•	•	0				•	•	•	•												
USE	Environmental: Erosion Shade Transitional/Na Visual: Street Trees Ornamental Screen-Tail Screen-Low	•		•		•							•		•													

4.4.2

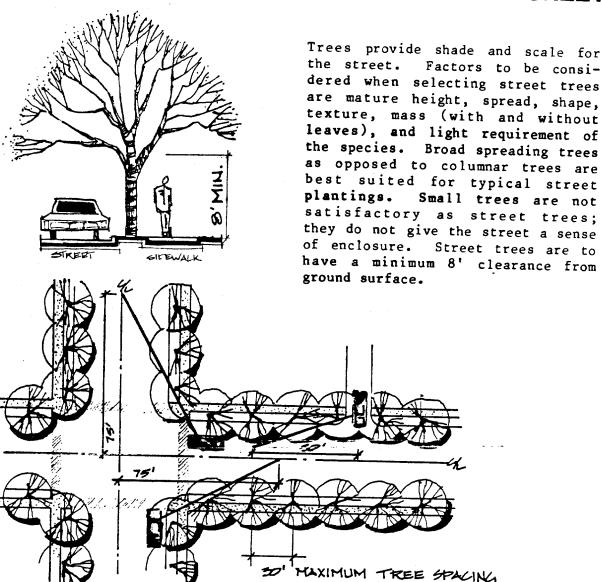
R	LA		EE SE EE
_AI	NT MATERIA	L/	TURF SHEET 3
_^	PPLICABLE		
	DUSTRIAL PEN SPACE	COMMON	Carpet Grass Bermudagrass Annual Hyegrass Annual Pyegrass  Annual Hyegrass
		BOTANICAL	Axonopus affinis Carr Cynodon dactylon *** Lolium multiforum Wildflower Seed Mix *  Wildflower Seed Mix *  Wildflower Seed Mix *  Tifway (Tifton 419)  40% annuals, 20% be of spring, summer  12 species. Mixture  tolerance and/or he
DESCRIPTION	Group: Evergreen Deciduous Growth rate: Fast Moderate Slow Texture: Coarse Medium Fine Flowering: Yes Form: Horizontal Rounded Oval Pyramidal Columnar Irregular Upright Spreading Weeping		s of bermuda, including Tirennials with a mixture ies using a minimum of 12 trosion control, shade to
CULTURE	Exposure: Sun Semi-shade Shade Moisture Requirement: H Medium Low Well-drained Pest/Disease: Subject Not Subject Soil Fertility: High Medium Low	igh	r suitable hybrials, and 40% pall blooming spee e adapted for
USE	Environmental: Erosion Shade Transitional/Natural Visual: Street Trees Ornamental Screen-Tall Screen-Low	aT .	* * *

4.5.1 ADM, CF, MS, HSG, OS, IND

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#### STREET & SHADE TREES

### SHEET 1/3



6' STANDARD BACK OF CURB TO SIDEWALK

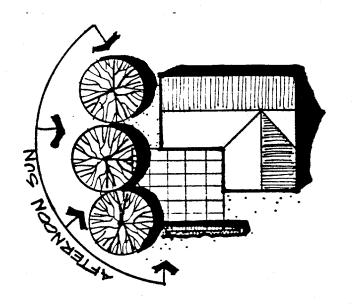
Field of vision at intersections will not be blocked by tree trunks. Street trees will be arranged to allow the driver at least a 75 foot view in both directions. At exits, trees along the street should be located far enough from the driveway to allow a driver to see at least 50' in both directions before entering the street.

4.5.1 ADM, CF, MS, HSG, OS, IND

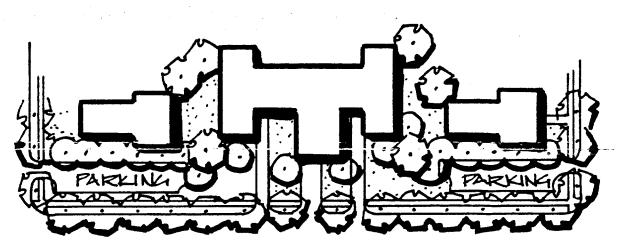
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#### **STREET & SHADE TREES**

SHEET 2/3



Shade trees are to be selected on the basis of their mature height and spread, form, color, texture, and their neatness. Large shade trees will be located on SW, W, and NW sides of buildings and large paved surfaces. Large trees are to be located a minimum of 15' from buildings; small ornamental trees are to be planted a minimum of 8' from buildings.



The regular spacing of street trees will be maintained along roads; other trees can be used to frame the building or direct views. Smaller trees can then be used to screen and add visual interest; they become part of the foundation planting.

4.5.1 ADM, CF, MS, HSG, OS, IND

streets. An overall sense of enclosure will be maintained, although breaks for

views and openings will add variety.

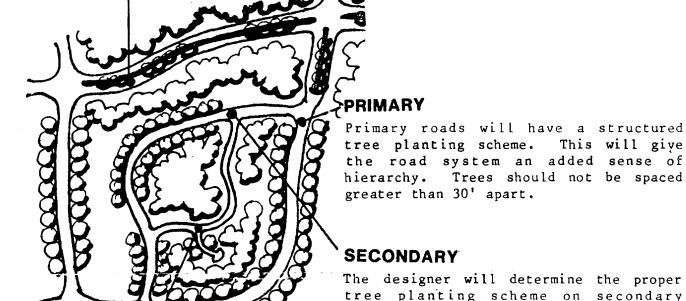
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#### STREET & SHADE TREES

SHEET 3/3

#### **HIGHWAY/PARKWAY**

On highway and parkways as much of the original vegetation is to remain as possible. New plantings will supplement natural conditions, when planting or clearing to open views, ease of access for maintenance vehicles will be considered.



#### TERTIARY/CUL-DE-SACS

On tertiary streets and cul de sacs, the trees which will be planted to frame and shade the houses will form the basis of the green belt system. The designer will determine those areas where street trees will benefit the visual environment of the neighborhood.

4.6.1 ADM, CF, MS, HSG, OS, IND

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SCREEN	ING			SHE	ET 1/6

Screening techniques shall be used to block undesirable views, to separate incompatible uses, and to add privacy. Vegetation will be used as the primary method of screening on Post. Berms can be used but their use must follow guidelines as specified in this section. Architectural screens by themselves or in conjunction with plant material will be used where instant effect is necessary or where space precludes the use of alternative screening techniques.

THE GRAPH SHOWS THE TYPE OF SCREENING ALLOWED IN EACH LAND USE ZONE.

LAND USE ZONE

L	PLANTING	PLANTING/BERM	WALL	WALL/PLANTING	WALL/BERM/PLANTING	FENCE	FENCE/PLANTING
ADMINISTRATION	•	•	•	•	•		•
COMMUNITY FACILITIES	•		•	•	•		•
HOUSING	•	•					•
INDUSTRIAL	•	•				•	•
OPEN SPACE	•	•				•	•
MISSIÓN SUPPORT	. •	•					•

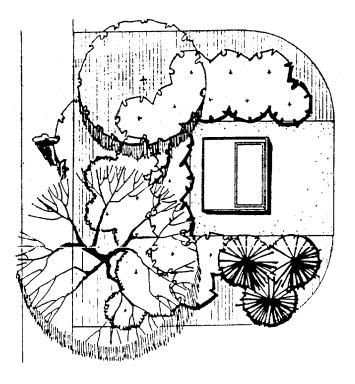
4.6.1 ADM, CF, MS, HSG, OS, IND

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#### **SCREENING**

SHEET 2/6

Screening techniques shall be used to block undesirable views, to separate incompatible uses, and to add privacy. Vegetation will be used as the primary method of screening on Post. Berms can be used but their use must follow guidelines as specified in this section. Architectural screens by themselves or in conjunction with plant material will be used where instant effect is necessary or where space precludes the use of alternative screening techniques.



THIS SUREEN USES A VARIETY OF PLANT MATERIALS IN AN "UN-HEDGE" MANNER. EVER-GREEN SHRUBS AND TREES MAKE UP THE BACKBONE OF THE PLANTING, SMALLER FLOWERING TREES AND LARGE TREES GIVE ADDED INTEREST, ASINCLE ROW OF SHRUBS SHOULD BE AVOIDED WHEN ADEQUATE SPACE EXISTS TO ESTABLISH A MORE VARIED PLANTING.

4.6.1 ADM, CF, MS, HSG, OS, IND

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#### **SCREENING**

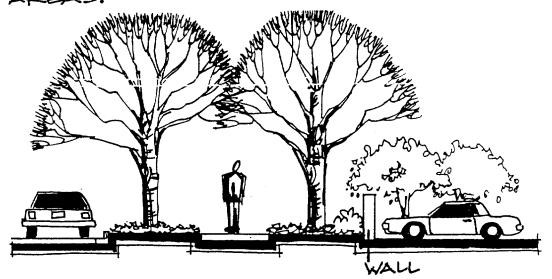
SHEET 3/6
MAJOR ROAD-HIGHLY VISIBLE AREA

IN AREAS WHERE THERE
15 NOT ADEQUATE SPACE
TO FORM A VEGETATIVE
SCREEN THE APPROPRIATE
WALL WILL BE USED.
SHRUBS CAN SOPTENTHE
WALL. CONTAINED SPACES
OF LESS THAN 3' WILL
NOT BE FLANTED IN
SHRUBS UNLESS THEY ARE
TO BE ESPALIERED, OR IF
THEIR MATURE HEIGHT 15

ARE APPROPRIATE INTHESE AREAS.

WALL STATES OF THE STATES OF T

4" MIN. WITH TREE



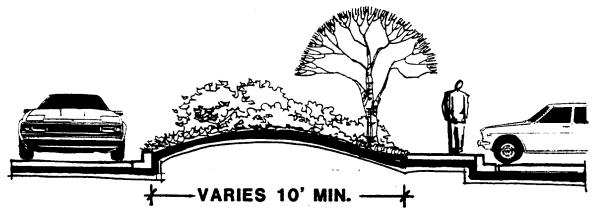
DUE TO EXPENSE OF CONSTRUCTION AND COST OF MAIN-TENANCE, WALLS SHOULD BE USED ONLY IN HIGH VISIBILITY AREAS WHERE NECESSARY.

4.6.1 ADM, CF, MS, HSG, OS, IND

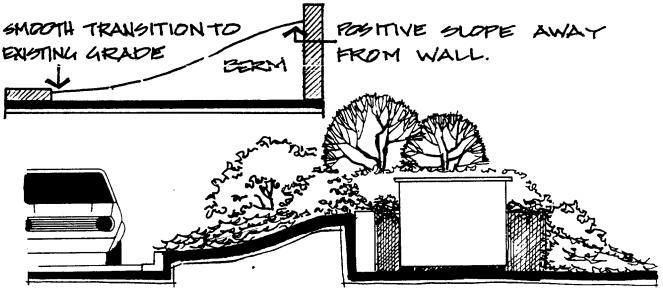
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#### **SCREENING**

SHEET 4/6



BERMS WILL HAVE A MINIMUM HEIGHT OF 3! THEY WILL HAVE A MAXIMUM SLOPE OF 3:1, A MINIMUM SLOPE OF 5:1. EVERGREEN SHRUBS AND/OR TREES WILL BE PLANTED BELOW RIDGE OF BERM FOR YEAR-ROUND SCREEN. DECIDUOUS PLANT MATERIAL WILL ADD SEASONAL INTEREST, GROUNDLOVERS/WILDFLOWERS MAY ALSO BE USED ON THE BERM.



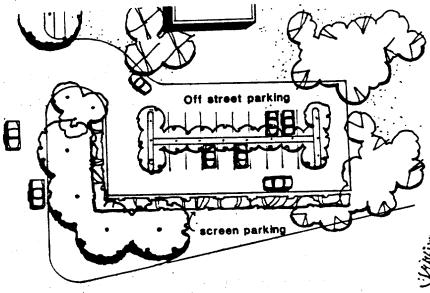
PLANTED BERM IN CONJUNCTION WITH RETAINING WALL.

4.6.1 ADM, CF, MS, HSG, OS, IND

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#### **SCREENING**

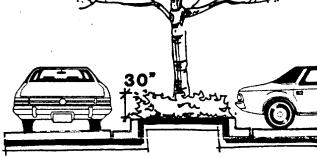
SHEET 5/6

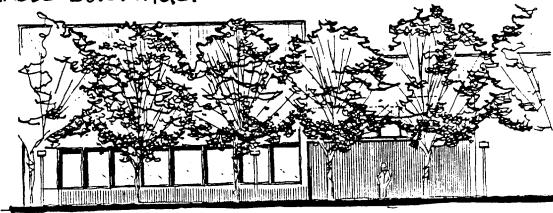


SHRUBS AND/OR TREES CAN EFFECTIVELY BUFFER PARKING LOTS FROM STREETS AND WALKWAYS.

THE FLANTING OF TREES AND A 30" HIGH BUFFER WILL BYCHOLOGICALLY SCREEN PAKKING LOB.

A SIMPLE ROW OF TREES GAN BUFFER LARGE ARCHITECTURALLY OBJECTIONABLE BUILDINGS.





4.6.1 ADM, CF, MS, HSG, OS, IND

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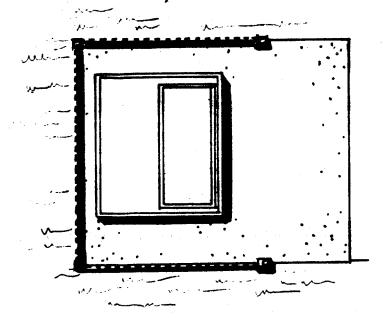
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#### **SCREENING**

SHEET 6/6

IN SOME AREAS ON POST THE SCREEN/FENCE BY ITSELF IS AN APPROPRIATE SOLUTION, SUCH AS IN LOW VISIBILITY, SERVICE AND INDUSTRIAL ARES.



DECORATIVE WOOD OR SLATTED CHAIN LINK FENCE IS RECOMMENDED IN THIS SITUATION.

4. / . 7 ADM, CF, MS, HSG, OS, IND

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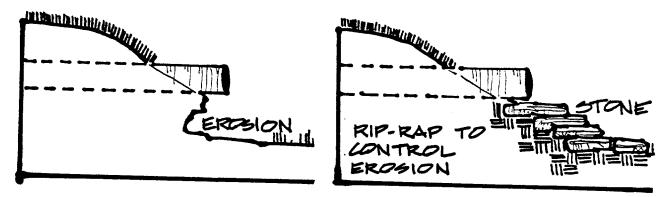
## **EROSION CONTROL**

SHEET 1/6

The following techniques to reduce the generation of sediment will be applied to all sites undergoing construction.

Careful programing of a development may enable the developer to reduce the area stripped of vegetation at any one time. A large development which is phased over a number of years is an example. However, high mobilization costs of heavy earth-moving machinery may dictate that all earth moving be done at one time. If this is the case, all areas of the site which will not be used for construction within 6 months will be seeded.

Topsoil from all areas undergoing construction should be stripped to a depth of 9" and stockpiled. The location of these stockpiles should be carefully selected so as not to obstruct site operations and result in double handling. Topsoil mounds should not be more than 8' in height with side slopes of l:1.5-1:2. If they are to be in position for more than 6 months, seed with a temporary seed mix. A shallow trench around these mounds made with a bull-dozer blade will prevent soil erosion from mounds from washing into adjacent property or into drainage channel. Respread topsoil and imported topsoil, if required.

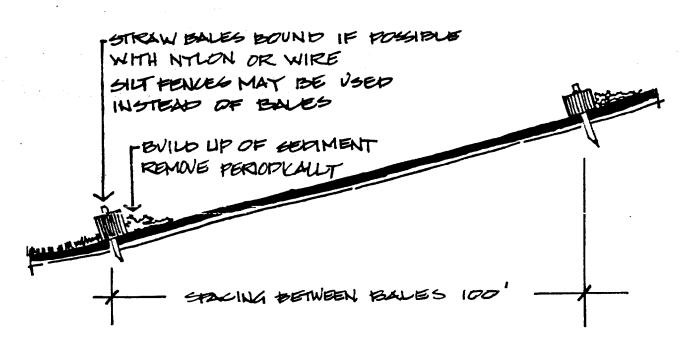


RIP-RAP SHOULD BE USED WHEN PHTSICAL CONDITIONS ARE TOO SEVERE FOR ESTABLISHMENT OF A VEGETATIVE COVER. TO PREVENT UNDERCUTTING ALL ROCK WILL EXTEND SEVERAL FEET OR MORE BELOW EXISTING GIROUND SURFACE.

4.7.1 ADM, CF, MS, HSG, OS, IND

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EROSIC	N CON	TROL		SHE	ET	2/6

Straw bales may be used to filter sediment from runoff generated by large stripped areas. Where the length of slope exceeds about 100', the accumulation runoff may cause serious erosion. Therefore, downslope of all stripped areas where the length of slope exceeds 100' a continuous line of straw bales should be staked (with wooden stakes) along the contour. Where they do not obstruct construction activities, lines of bales may be staked at regular 100' intervals along the contour on very long slopes. Regular inspection and removal of sediment is necessary, particularly where only one line of bales is used on long slopes. (Straw may be used for mulching when the area is finally seeded.).



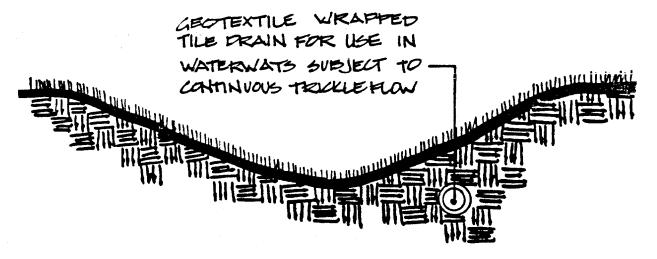
4.7.1 ADM, CF, MS, HSG, OS, IND

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<b>EROS</b>	ION CO	NTROL		SHE	EET	3/6

Grass-lined channels are cheaper and are usually much more acceptable than those lined with concrete. Grass will delay run-off and considerably reduce the energy and consequently the erosive capacity of run-off. The vegetated waterway maximizes the loss of surface runoff through infiltration.

Parabolic cross-sections are most commonly found in nature. Side slopes should not exceed 3:1 to enable the channel to be mowed. These waterways should be located at areas of suitable grade where soil moisture conditions are favorable to vegetative growth. Natural swales should be favored, if possible.

It is important to avoid excessive compaction during construction by earthmoving machinery which will result in an inferior grass sward. Between the time of seeding the cover and the actual establishment, the waterway will be unprotected and subject to damage. Provisions should be made to divert flows during this period. Vegetated waterways should not be subject to continuous flows of water nor be kept wet, since this will destroy good turf. A tile drain can help to offset this problem. Tiles should be laid parallel to the center line of the waterway but offset from the center by at least 1/4 its top width. This will prevent washout of the backfill material for the tile system. Use a 4" perforated P.V.C. wrapped in a sediment blocking geotextile fabric.



ADM, CF, MS, HSG, OS, IND

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#### **EROSION CONTROL**

SHEET 4/6

#### **HYDROSEEDING**

Hydroseeding is an effective way of establishing grass or wildflowers. The following general guidelines apply to hydroseeding in high visibility areas.

All cut slopes shall be scarified or horizontally ripped to a depth of six inches across the slope and spaced not more than twelve inches apart on the slope, thus allowing pockets or cavities for the absorption of seeds, fertilizer and fiber mulch products between the cracks and crevices. This scarification process will facilitate a high water-holding capacity which in turn allows the hydroseeded seedling root systems to absorb more moisture which is trapped beneath the rocks and pebble particles. Hence, the seedlings will be allowed to grow and become established more rapidly. Furthermore, the scarification of cut slopes reduces seed and fiber erosion during intense rains and/or prolonged irrigation.

All fill slopes shall be sheepsfoot rolled. The 2" x 2" x 4" rolled depressions shall be left undisturbed and no cultipacking shall be performed. Once the sheepsfoot depressions are made, the hydroseeder will take care and ensure that he sprays the fiber mulch into all rolled depressions. The depressions act as pocket reservoirs for seeds, fertilizer and water as well as shade and wind protection for the young germinating seedlings. The depressions also act as surface erosion control pockets trapping eroding overburden soils during heavy rains.

Flat areas and along roadsides and easements where hydroseeding is to be utilized should be disced to a depth of six inches, thus removing all weeds and allowing the areas to be left in a noncompacted roughened conditions to facilitate the retention of hydromulching fertilizer and seed when the hydroseeding application is sprayed.

All existing vegetation is to be manually and mechanically removed.

Fertilize all planting areas with 16-20-0 commercial fertilizer (or by soil analysis recommendations) at the rate of one-half pound per 1,000 square feet. Add any and all soil amendments as required per soil analysis. Begin watering process to activate fertilizer and chemicals. Water all planting areas thoroughly and continuously for a period of two consecutive weeks. This allows all residual weed seeds to germinate.

4.7.1 ADM, CF, MS, HSG, OS, IND

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#### **EROSION CONTROL**

#### SHEET 5/6

#### HYDROSEEDING, CONT.

Discontinue watering process for two days. Then apply a nonselective systemic herbicide if perennial weeds appear on the slopes. The type of chemical to be used will be determined by a Licensed Pest Control Advisor. If annual weeds appear, use straight contact herbicide as per Pest Control Advisor's recommendations. No water shall be applied for a minimum of four days following application of contact weed killer. Allow sufficient period of time to ensure that all weeds are dead.

Water all planting areas thoroughly and continuously for a period of three weeks. A shorter watering period may be permissible at the discretion of the landscape architect and/or his pest control advisor. Discontinue watering process for one day prior to the second application of the herbicide spraying. Reapply the spraying operation with a straight contact weed killer as per pest control advisor's recommendations. Allow a minimum of four days without irrigation for effective final weed kill.

Clear all desiccated weeds from the slope to the finished grade and water all planting areas thoroughly and continuously for three consecutive days to saturate upper layers of soil prior to the hydroseeding operation.

Then allow planting soil surface to dry out for one day only prior to the hydroseeding application. Care must be taken not to allow the soil surface to be super saturated with water prior to the hydroseeding installation. At the same time, the soil surface should not be bone dry. There should be some residual moisture within the first 1/4 inch of the soil surface.

The hydromulching shall be applied in the form of a slurry consisting of organic soil amendments, commercial fertilizer and any chemicals specified. When hydraulically sprayed onto the soil, the mulch SHALL FORM A BLOTTER-LIKE MATERIAL. The spray operation must be so directed that the slurry spray will also penetrate the soil surface as to drill and mix the slurry components into the soil, thus ensuring maximum impregnation and coverage. The impregnation and mixing of the components will help in retaining moisture while stabilizing soil surface from surfacial erosion.

The slurry shall be prepared at the site and its components shall be mixed to supply the rate of application as per specifications.

4.7.1 ADM, CF, MS, HSG, OS, IND

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#### **EROSION CONTROL**

SHEET 6/6

HYDROSEEDING, CONT.

The operator shall spray the areas with a uniform visible coat using the dark color or dye of the cellulose fiber or organic amendment as a visual guide. The slurry shall be applied in a downward drilling motion via a fan stream nozzle. It is important to ensure that all of the components enter and mix with the soil. The hydromulch has a tendency to build up on each other. Therefore, it is important that the contractor employ only qualified personnel to ensure uniformity of the hydromulch application.

Approximately 25 hours after hydromulching the planting areas, the watering sequence should be initiated. The water should be applied by water truck or temporary irrigation system and regulated to moisten the soil thoroughly to the depth of the slurry mulch taking care not to super saturate or wash away the slurry and seeds. Frequent, light waterings must be performed to establish seedling growth. Furthermore, it must be brought to mind that the slurry mulch and seed must be irrigated frequently to maintain optimum moisture content for maximum germination. It is imperative the soil be kept moist at all times during the germination period. The germination stage will range from 45 to 60 days. General care and maintenance shall consist of the proper watering, fertilizing and cleanup during the germination and establishment period of growth.

Note: In low visibility and general erosion control areas, begin the actual hydromulching after all existing vegetation has been removed by a single spraying of a non selective systemic herbicide followed by four days without rain. Once desiccated vegetative material has been removed mechanically, the hydromulching process can occur.

4.8.1 ADM, CF, MS, HSG, OS, IND

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### REFORESTATION

SHEET 1/2

The field planting of pine and or hardwood seedlings is one way of regenerating land. When selecting species, the indigenous plants of the area should be considered first. The staff forester should be consulted in all stages of reforestation. The following are general guidelines.

Site preparation is important, 'Roundup' cleans the field of competing vegetation. Loblolly 'improved' is a commonly used pine for reforestation. It will take approximately 1200 seedlings per acre if planted 6' on center. Seedlings may be machine or hand planted, for the best results they should be planted in the fall. Competing vegetation may have to be removed at least once during the first year of growth; this should be supervised by the staff forester. After seven years, fires may be used for unwanted vegetation control.

Owing to their rapid growth and the relative ease with which they can be planted, conifers are likely to remain far more important than the hardwoods in planting. Planted hardwoods don't thrive on sites of abandoned agricultural land covered with grass and other herbaceous growth. Sometimes the best way to create hardwood stands on sod is to plant conifers and then wait for the natural establishment of a deciduous understory. If the soil is not too heavy for such use of planted conifers, this procedure may be desirable merely to forestall the development of the stands of poorly formed trees that often appear when hardwood species slowly recolonize grassy areas. The sequence of one rotation of mediocre conifers followed by one of hardwoods of seedling origin is infinitely superior to that of one rotation of wolf trees succeeded by hardwoods of sprout origin.

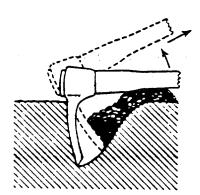
Hardwood plantations can make satisfactory growth on barren areas created by erosion, recent cultivation, site preparation, or the deposition of overburden from open-pit mining. They will also grow well on cutover lands and brushy areas that are free of grass, provided that the competition of shrubs and coppice shoots is kept under control.

4.8.7 ADM, CF, MS, HSG, OS, IND

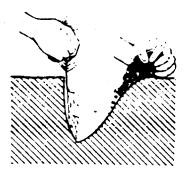
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#### REFORESTATION

SHEET 2/2



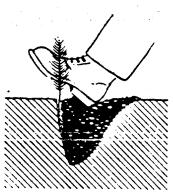
1. Drive grub hoe into ground, lift handle, and pull hoe back.



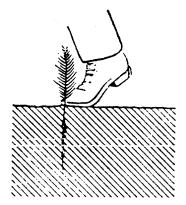
2. Place seedling against straight side at correct depth.



3. Fill bottom of hole and pack soil against roots.



4. Finish filling in soil and pack it with heel.



5. Firm around seedling with the feet.

SIDE-HOLE METHOD OF HAND PLANTING

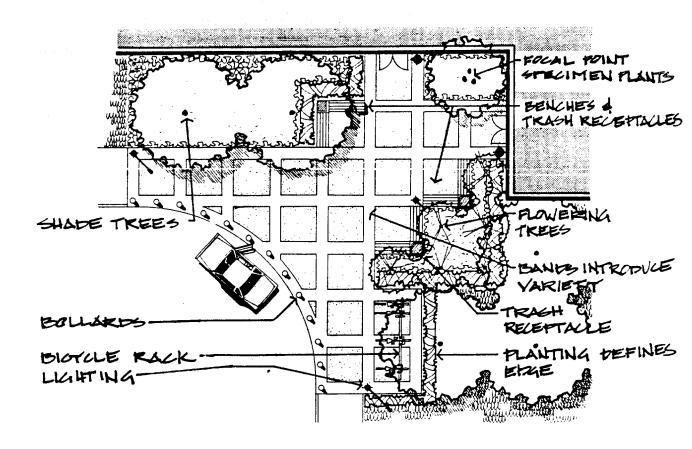
#### 4.9.1 ADM, CF, MS

## 4. Landscaping

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ENTRY	PLANTI	NG		SH	<b>EET1/4</b>

The landscaping of major buildings will intensify the sense of arrival. Paving and the proper placement of trees, shrubs, and groundcover are to direct the pedestrian to the entrance. Large trees are to bring large buildings down to a human scale and provide valuable shade. Flowering trees are to give added dimension and seasonal variation. Other plant material will help define the space.

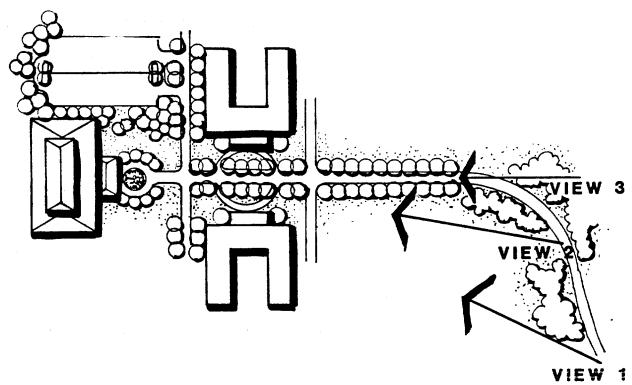
# APPROPRIATE ENTRY TREATMENT FOR MAJOR BUILDINGS



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**ENTRY PLANTING** 

SHEET 2/4



#### BUILD A SENSE OF ARRIVAL

VIEWS 1 & 2 - PLANTING SHOULD BE PLANNED TO ALLOW GLIMPSES OF POST BUILDINGS IN AN ENTRY SEQUENCE.

VIEW 3 CONCENTRATES THE VIEW ON THE PRIMARY BUILDING AT THE END OF THE AVENUE. THE STREET TREE PLANTING ENFORCES THE PROCESSIONAL QUALITY OF THE SPACE-GIVING ADDED IMPORTANCE TO THE BUILDING AT THE END.

4.9.1 ADM, CF, MS

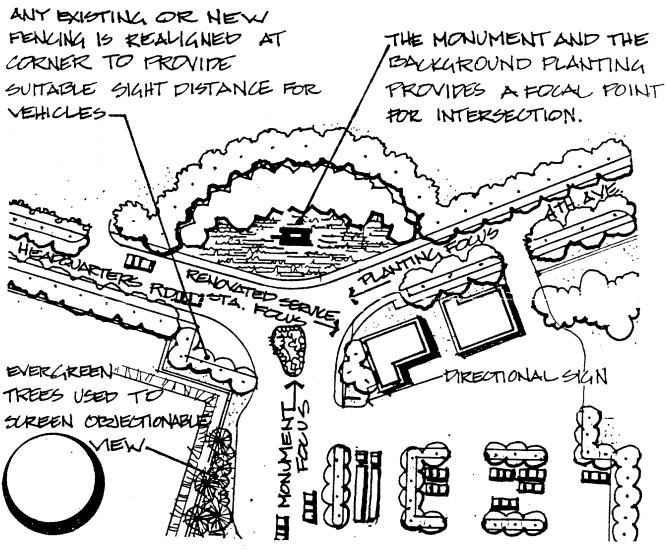
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#### **ENTRY/PLANTING**

SHEET 3/4

#### INTERSECTIONS

Since roads are a primary vantage point along which most people see the Post, high visibility intersections deserve landscape treatment. Besides simply planting, intersections may provide a place to display monuments. Planting may function as a backdrop for these pieces. Vehicular and pedestrian safety is the primary concern-landscaping will not block crucial sight lines.



HIGHLY VISIBLE INTERSECTIONS

4.9.1 ADM, CF, MS

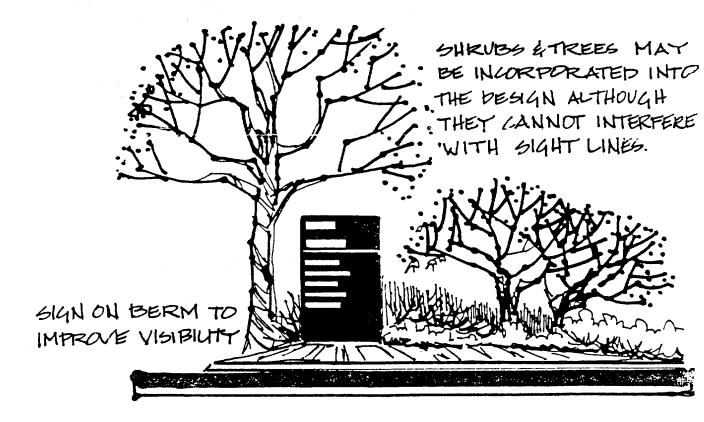
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#### **ENTRY PLANTING**

SHEET 4/4

A sign's fundamental purpose is to communicate information clearly and concisely and it should be attractive and harmonious with its surroundings. Signs identifying administration buildings, headquarters, or major facilities are to be placed in landscaped beds. These signs may be placed on berms to aid visibility. Groundcovers or low shrubs that will not interfere with the readibility of the sign may be used at the signs' base. Trees and shrubs may be incorporated into the landscape around the sign if there is enough space and the sign designates important functions or buildings.

#### TREATMENT FOR SINGLE FACED SIGN

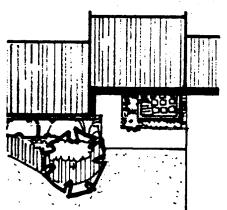


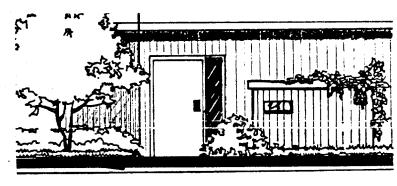
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#### **ENTRY PLANTING**

SHEET 1/6

Entry plantings in the housing areas are to direct the eye and the pedestrian to the front door. The entry walk and corresponding landscape should pleasantly welcome the visitor. The basic principles of planting design are to be generally followed; larger plants on the corners and accent planting at the entrance. Generally coarse textured plants are located on the outside of the composition while progressively finer textures work their way inward. Evergreen's will make up the major part of the composition, deciduous plants may be used to add seasonal interest and color. Ultimate plant height and spread are to be considered during planning. The architecture of the building should not be overwhelmed by plant material. Plant varieties should be kept to a minimum to satisfy the requirements and objectives of the design. By limiting the varieties of plants, rather than cluttering the design with a planting mixture, clashing colors and forms are less likely to occur, and a unified composition will be created. Repetition with occasional contrast contributes to a successful planting design. Annual beds and sheared hedges require a great deal of costly maintenance and should be used sparingly in selected locations. The following illustrations show different approaches to the design and planting of entries.





FNTRY DIAN

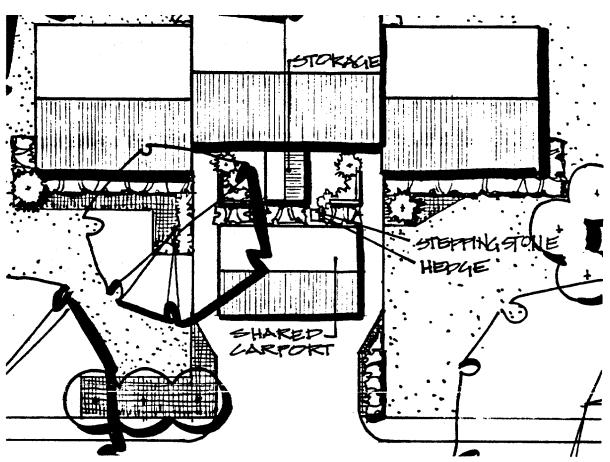
#### ENTRY ELEVATION

NOTE-THE ORNAMENTAL TREE PROVIDES A FOCAL POINT FOR THE ENTRY WALK. THE SCREEN CREATES A SMALL PRIVATE AREA PROTECTED FROM THE STREET AND ALSO ADDS ANOTHER DIMENSION TO THE HOUSE, PLANTING ENHANCES THE ARCHITECTURAL CHARACTER OPTHE SCREEN.— THE VINE AND THE GRONDCOUER OR LOW SHRUB MASS BELOW.

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**ENTRY PLANTING** 

SHEET 2/6



#### **DUPLEX/DETACHED CARPORT**

NOTE THE HEDGE BETWEEN THE CARPORT AND SCREEN THIS SOPTENS AN OTHERWISE HARSH VIEW. THE LARGE TREE SHADES THE CARPORT AND THE LARGE EXPANSE OF PAVING. PLANTING IS KEPT SIMPLE. SHADE TREES FRAME BUILDING FROM STREET.

4.9.2

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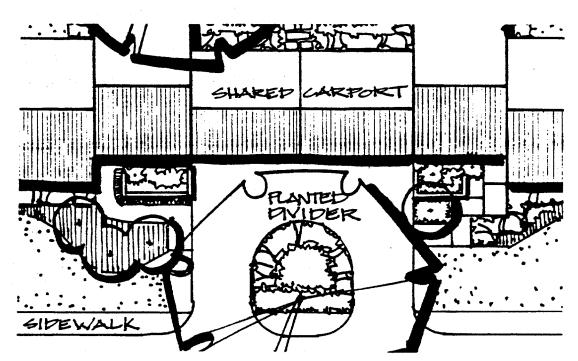
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**ENTRY PLANTING** 

SHEET 3/6



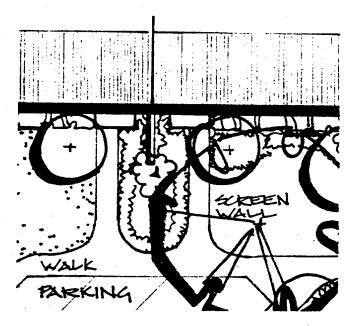
**DUPLEX/ATTACHED CARPORT** 

THIS DRAWING IUNSTRATES TWO DIFFERENT APPROACHES TO ENTRY PLANTING - ONE CURVILINEAR THE DTHER RECTILINEAR. THE DIVIDER ISLAND IN THE DRIVEWAY BREAKS UP THE FACADE OF THE DUPLEX, AND THE TREE PROVIDES SHADE TO COOL THE PAYING. THIS DESIGN ALSO ENABLES THE STREET TREE PLANTING TO CONTINUE UNINTER-RUPTED.

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**ENTRY PLANTING** 

SHEET 4/6



DIVIDED WALKWAT WITH SCREEN WALL DETWEEN ENTRANCES FOR PRIVACT

TWO ENTRY APPROACHES

TWO ENTRY APPROACHES
FOR ATTACHED HOUSING

ENTRANCES - THESE ARE
LOCATED AS FAR FROM
EACH OTHER AS FOSSIBLE FOR PRIVACT.
UTILITY METERS SHOUD
BE LOCATED IN BACK
OF BUILDING; IF THIS IS
IMPOSSIBLE THESE BOXES
SHOULD BE SCREENED
FROM VIEW WITH AN
APPROPRIATE ARCHITECTURAL ELEMENT
AND PLANTING.

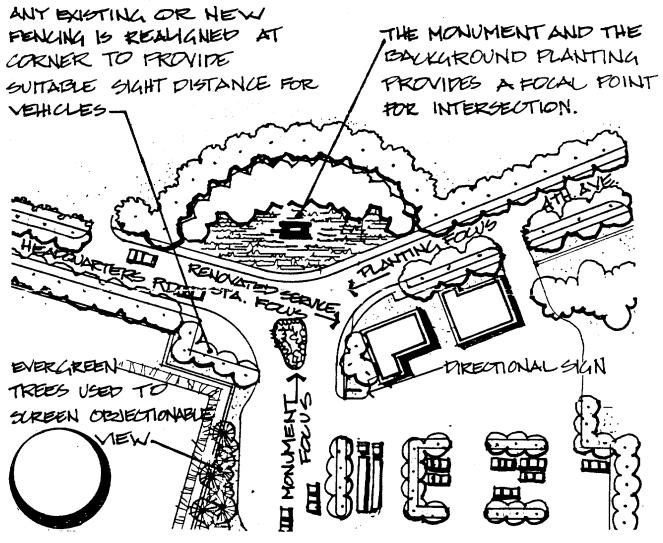
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#### **ENTRY/PLANTING**

SHEET 5/6

#### **INTERSECTIONS**

Since roads are a primary vantage point along which most people see the Post, high visibility intersections deserve landscape treatment. Besides simply planting, intersections may provide a place to display monuments. Planting may function as a backdrop for these pieces. Vehicular and pedestrian safety is the primary concern-landscaping will not block crucial sight lines.



HIGHLY VISIBLE INTERSECTIONS

4.9.2

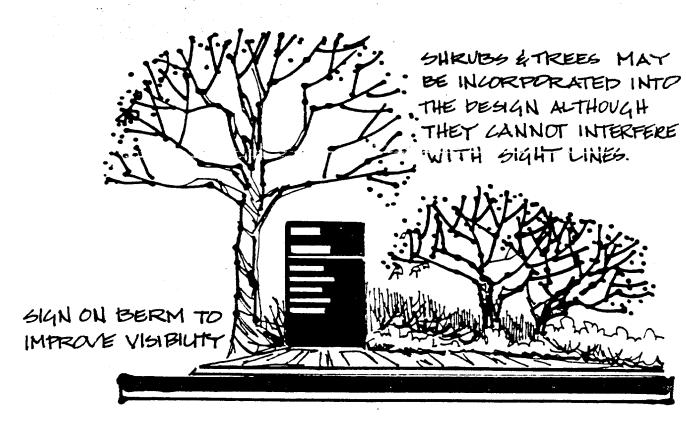
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#### **ENTRY PLANTING**

SHEET 6/6

A sign's fundamental purpose is to communicate information clearly and concisely and it should be attractive and harmonious with its surroundings. Signs identifying administration buildings, headquarters, or major facilities are to be placed in landscaped beds. These signs may be placed on berms to aid visibility. Groundcovers or low shrubs that will not interfere with the readibility of the sign may be used at the signs' base. Trees and shrubs may be incorporated into the landscape around the sign if there is enough space and the sign designates important functions or buildings.

#### TREATMENT FOR SINGLE FACED SIGN



4.9.3

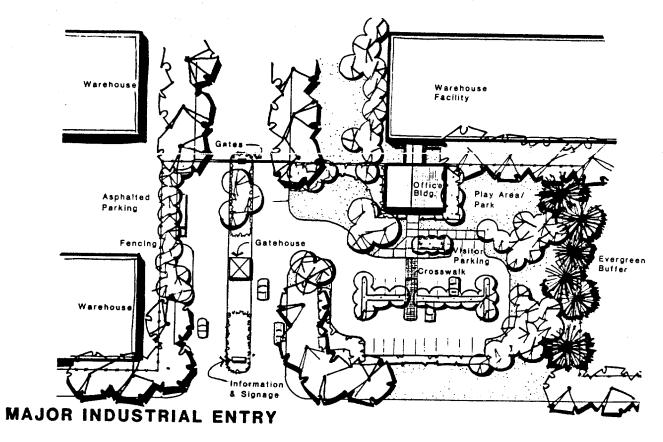
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#### **ENTRY PLANTING**

SHEET 1/2

In the Industrial Land Use Zone, landscaping will be concentrated at major entrances, 100' either side of these entrances will be landscaped. The sign, gatehouse, and administrative office building will receive extensive landscape treatment, while the perimeter fences and walls of the industrial areas will be landscaped to buffer this zone from adjacent zones.

The office building will have its own parking lot with ample visitor parking, all screened from major streets. The entry to the major office building will be well defined by plant and paving materials. Large and small trees are to spatially define the vehicular and pedestrian entrances and also provide screening. Trees will be used to soften boundary fencing and buffer the large industrial/warehouse facilities. Outdoor park areas are to be incorporated into the design to provide an active and passive recreation area for workers in the vicinity. The industrial area is secured with an appropriate fence or wall which may be softened with landscaping if necessary.



4.9.3

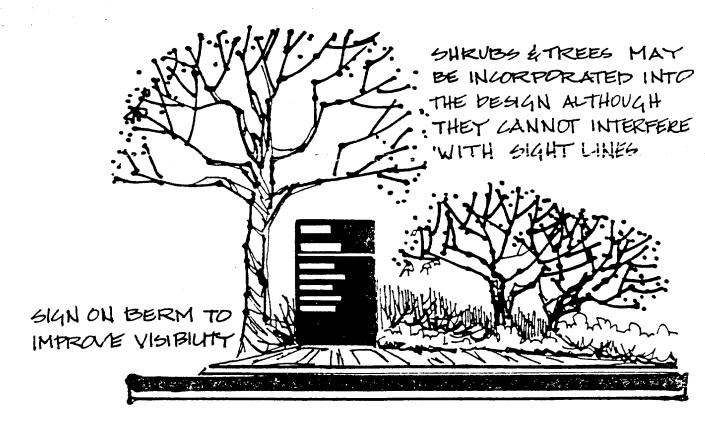
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#### **ENTRY PLANTING**

SHEET 2/2

A sign's fundamental purpose is to communicate information clearly and concisely and it should be attractive and harmonious with its surroundings. Signs identifying administration buildings, headquarters, or major facilities are to be placed in landscaped beds. These signs may be placed on berms to aid visibility. Groundcovers or low shrubs that will not interfere with the readability of the sign may be used at the signs' base. Trees and shrubs may be incorporated into the landscape around the sign if there is enough space and the sign designates important functions or buildings.

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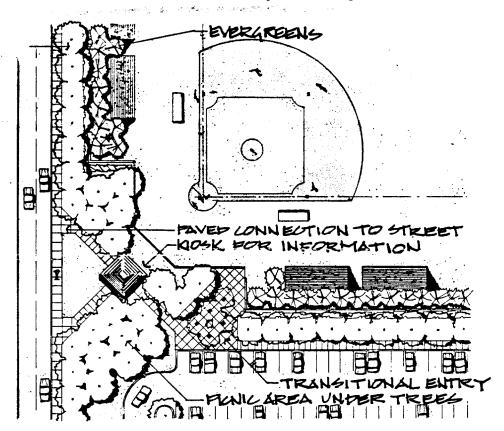


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#### **ENTRY PLANTING**

SHEET 1/5

Open space encompasses many situations. Generally these may be grouped into active—intensive use areas and passive use areas. Landscaping in an intensive use area requires more paving, because of pedestrian activity. Planting will define and soften the paving and provide the transition between the man—made hardscape to open space. Trees and grass will be used extensively in this zone, because of ease of maintenance. Evergreen landscape material or other architectural treatments are to be used to block or screen objectionable or undesirable views. A mixture of deciduous and evergreen plant material is an effective wind break which may be incorporated into a design as required.



OPEN SPACE/INTENSE USE

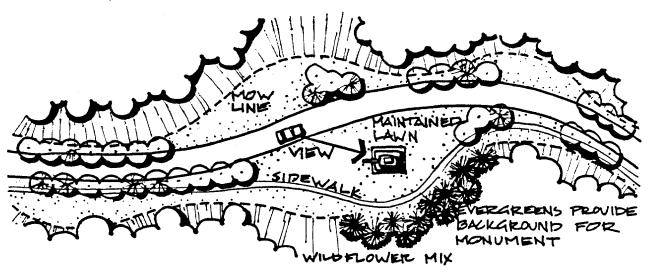
4.9.4

AR LA CE ME SE EE

**ENTRY PLANTING** 

SHEET 2/5

In passive use areas, landscaping will provide the transition from the man-made environment to the natural environment. Large and small trees, flowering trees, grass and the proper wildflower mix will be used to provide this transition. Plantings are to be massed with the distance between the masses providing ample space for maintenance vehicles.



OPEN SPACE/PASSIVE USE

4.9.4 os

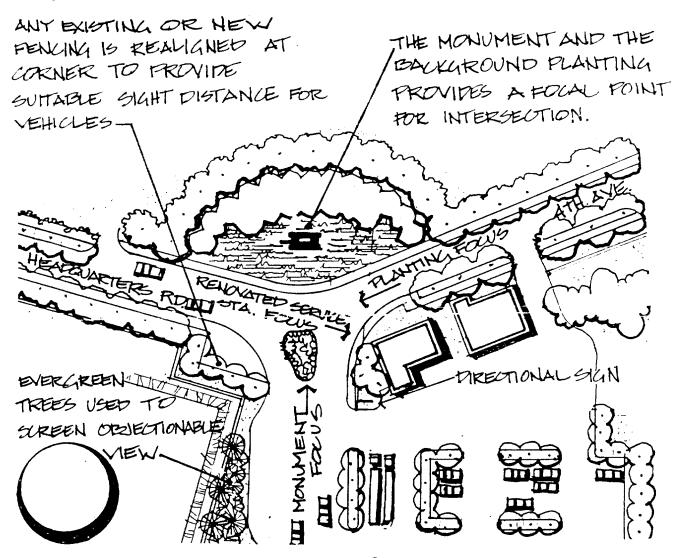
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#### ENTRY/PLANTING

SHEET 3/5

#### **INTERSECTIONS**

Since roads are a primary vantage point along which most people see the Post, high visibility intersections deserve landscape treatment. Besides providing space for landscaping, intersections may provide a place to display monuments. Planting may function as a backdrop for these pieces. Vehicular and pedestrian safety is the primary concern. Landscaping will not block crucial sight lines.



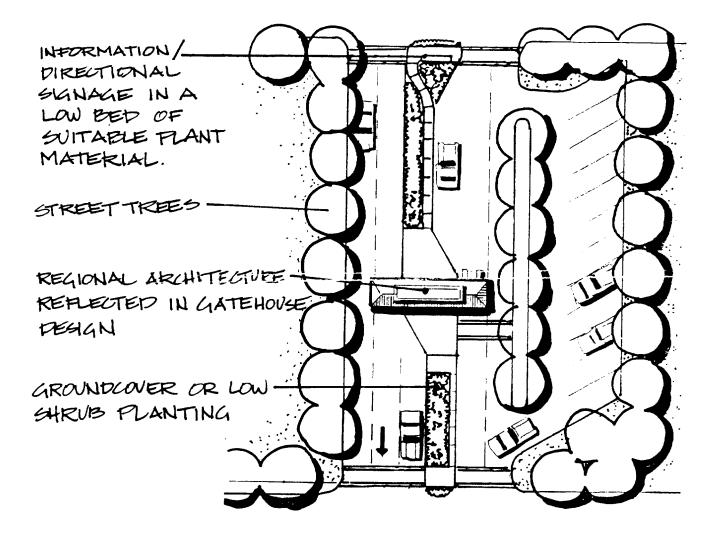
HIGHLY VISIBLE INTERSECTIONS

AR LA CE ME SE EE

#### **ENTRY PLANTING**

SHEET 4/5

The landscaping at gatehouses will create an attractive and safe sense of entry which reflects an appropriate character, image, and identity for the Post. The architecture of the gatehouse should reflect the architecture of the region. Low maintenance ground covers or a low shrub planting is to be used in the entry median to reduce sunglare and solar heat reflection while preserving sight lines. The street trees spatially define the entrance and visually reinforce the traffic circulation.



4.9.4

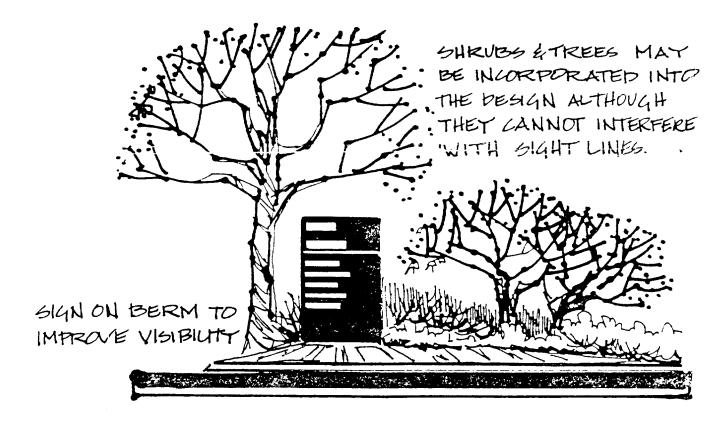
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#### **ENTRY PLANTING**

SHEET 5/5

A sign's fundamental purpose is to communicate information clearly and concisely and it should be attractive and harmonious with its surroundings. Signs identifying administration buildings, headquarters, or major facilities are to be placed in landscaped beds. These signs may be placed on berms to aid visibility. Groundcovers or low shrubs that will not interfere with the readability of the sign may be used at the signs' base. Trees and shrubs may be incorporated into the landscape around the sign if there is enough space and the sign designates important functions or buildings.

#### TREATMENT FOR SINGLE FACED SIGN



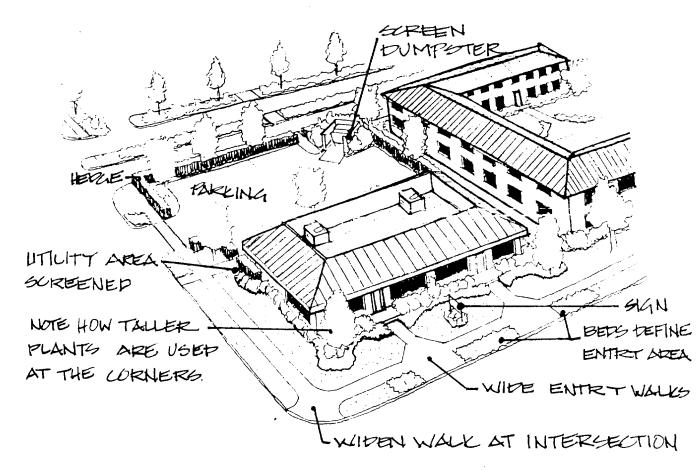
4.10.1 ADM, CF, MS

AR LA CE ME SE EE

#### FOUNDATION PLANTING

SHEET 1/2

IN THE SKETCH BELOW NOTE HOW THE WIDEWALKS INVITE THE PEDESTRIAN TO THE ENTRY AND HOW THE LANDSCAPING REINFORCES THE SENSE OF ENTRY. LANDSCAPING ALSO SCREENS OR BUFFERS THE PARKING LOT & DUMPSTER. THE TREE PLANTING REINFORCES THE STREET AND PROVIDES SHAPE FOR THE PARKING LOT. ALSO NOTE HOW THE EXPANDED WALK AT THE STREET INTERSECTION WILL ACCOMPODATE PEDESTRIANS.



AR LA CE ME SE EE

#### FOUNDATION PLANTING

#### SHEET 2/2

THE LANDSCAPING OF MAJOR BUILDINGS SHOULD REFLECT
THEIR IMPORTANCE. SIMPLICITY IS THE KEY. THE BOLLARDS
BIRECT VEHICULAR TRAFFIC & PROTECT THE PEDESTRIAN
PLAZA FROM INTRUSION. THE BUILDING IS BROUGHT INTO
SCALE BY THE LARGE TREES, THE SMALLER TREES ADD
VARIETY & INTEREST. OTHER FLANT MATERIAL VISUALLY
DEFINES THE SPACE. BONCHES & TRAGH RECEPTACIES ARE
PROVIDED FOR PEDESTRIAN CONVENIENCE.

-IN SHADED AREAS USE GROUNDCOVERS IN BEDS FOCAL POINT PLANTING BENCHES & TRACH RECPT. LARGE TREES trees add inter INTEREST PAYING ADDS INTEREST BOULARDS. RECEPTACLE DIKE RACKS PLANTING DEFINES 4445 ECHE

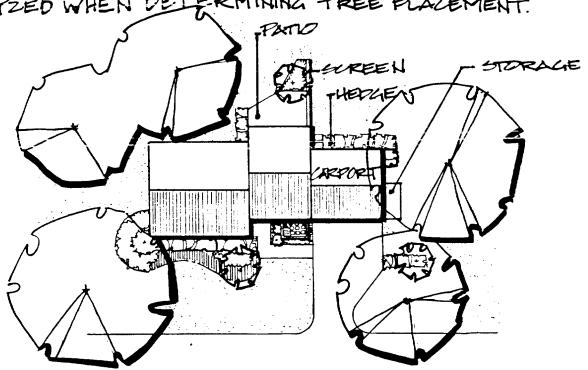
AR LA CE ME SE EE

#### FOUNDATION PLANTING

#### SHEET 1/2

LANDSCAPING IN HOUSING AREAS 15 TO CONCENTRATE ON FRONTS AND ENTRYS. SEE SECTION 4.9.Z. OTHER PLANTING 15 TO BE FUNCTIONAL ASWELL AS ABOTHETIC IN NATURE. THE TREES IN THE PLAN BELOW PROVIDE SHADE, SOME PRIVACT AND FRAME THE STRUCTURE. NOTICE THAT HEDGES & SCREENS GIVE PRIVACT TO THE PATIO WHICH WILL BE REQUIRED FOR EVERT HOUSING UNIT.

IN ORDER TO PRESERVE THE STREET TREE EFFECT INTO HOUSING AREAS, TREES SHOULD BE PLANTED ALONG THE STREET IN SUCH A MANNER AS TO PRAME THE HOUSE. SECTIONS OF NEIGHBORHOODS SHOULD BE AUALYZED WHEN DETERMINING TREE PLACEMENT.



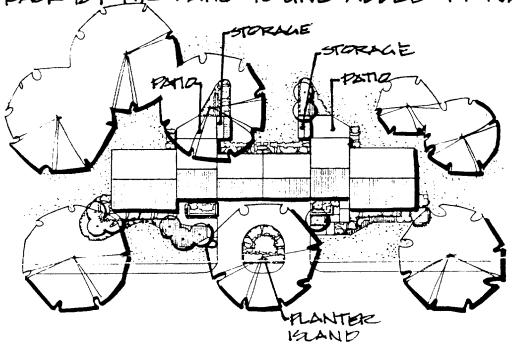
4.10.2 HSG

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#### FOUNDATION PLANTING

SHEET 2/2

NOTICE IN THE PLAN BELOW THE CURVILINEAR LATOUT ON THE LEFT AND THE RECTILINEAR LATOUT ON THE RIGHT.
THERE ARE REPRESENTATIVE LAYOUTS, EITHER A CURVILINEAR OR RECTILINEAR APPROACH WILL BE EMPLOYED WHEN LANDSCAPING A SINGLE BUILDING. (DUPLEX OR A MULTIFAMILY UNIT) NOTE THAT THE STORAGE UNITS HAVE BEEN MOVED TO THE BACK BY THE PATIO TO GIVE ADDED PRIVACT.



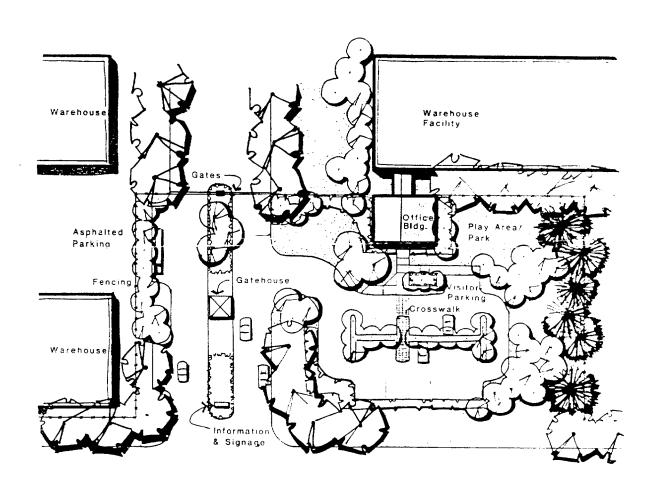
PLANTER ISLAND IN DRIVEWAY BREAKS UP THE EXPANSE OF THE LIVING UNITS ACTING AS A DIVIDER. THIS TREAT-MENT ENABLES THE STREET TREE FLANTING TO CONTINUE UNINTERRUPTED.

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### FOUNDATION PLANTING

SHEET 1/2

LANDOCATING IN INDUSTRIAL AREAS WILL BE CON-CENTRATED AT MAIN ENTRIES. WITHIN THE INDUSTRIAL AREA THE DESIGNER SHOULD CONCENTRATE ON DEFINING VEHICULAR PATHS AND PARKING. SEE SECTION ON PARKING.

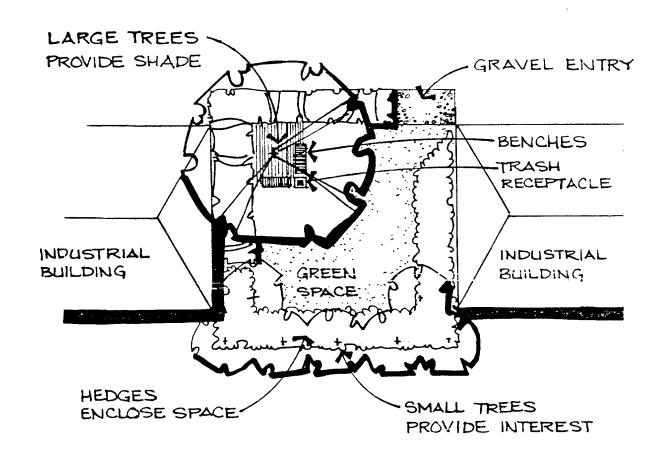


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#### FOUNDATION PLANTING

SHEET 2/2

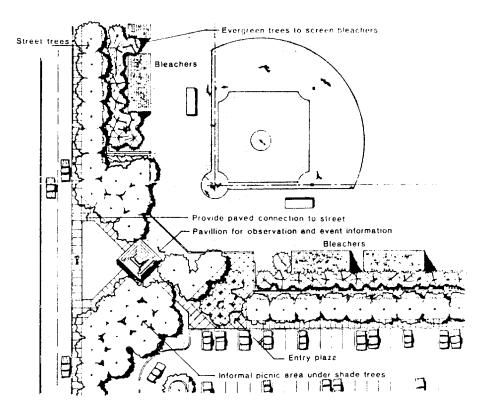
IN AN EFFORT TO PROVIDE A PEDESTRIAN RESPITE IN THE INDUSTRIAL AREA, GREENSPACES BETWEEN INDUSTRIAL BUILDINGS ARE TO BECOME MINI PARKS IN AREAS OF EMPLOYEE CONCENTRATIONS.



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#### FOUNDATION PLANTING

LANDSCAPING IN OPEN SPACE WILL BE KEPT RELATIVELY SIMPLE. LARGE'S SMALL TREES, GRASS, AND WILDFLOWER MIX SHOULD BE THE MAIN ELEMENTS OF THE PLANTING. PLANTINGS WILL BE ARRANGED AND GROUPED TO ALLOW MAINTENANCE VEHICLES APERVATE ROOM TO MANEUVER. IN AREAS OF OPEN SPACE THAT HAVE MAJOR BUILDINGS THE PLANTING SHOULD REFLECT THE BUILDINGS IMPORTANCE AND USE. HIGH USE AREAS WILL NECESSITATE THE USE OF MORE PAYING WHEREAS PASSIVE USE AREAS MAT BE GRASSED.



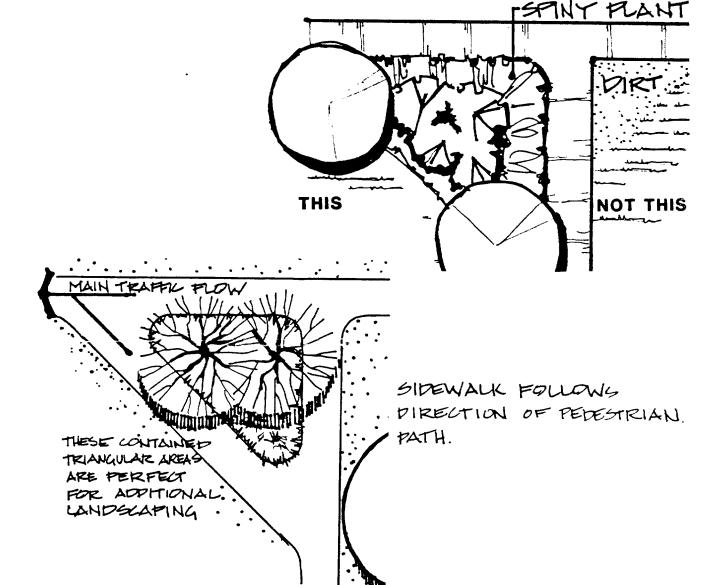
ACTIVE/INTENSIVE USE

4.11.1 ADM, CF, MS, HSG, OS

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#### PEDESTRIAN CONTROL

Planting in conjunction with paving can help direct pedestrian traffic. If planting is employed, a spiny-thorny plant would be appropriate to deter people from entering the planted area. Traffic flow should be considered before installing paving and planting. Paving should coincide with pedestrian routes.



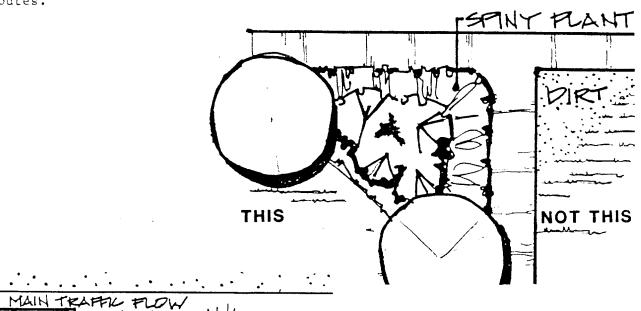
4.11.2

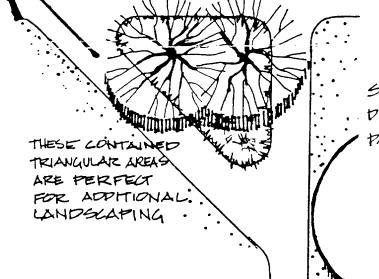
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#### PEDESTRIAN CONTROL

#### SHEET 1/2

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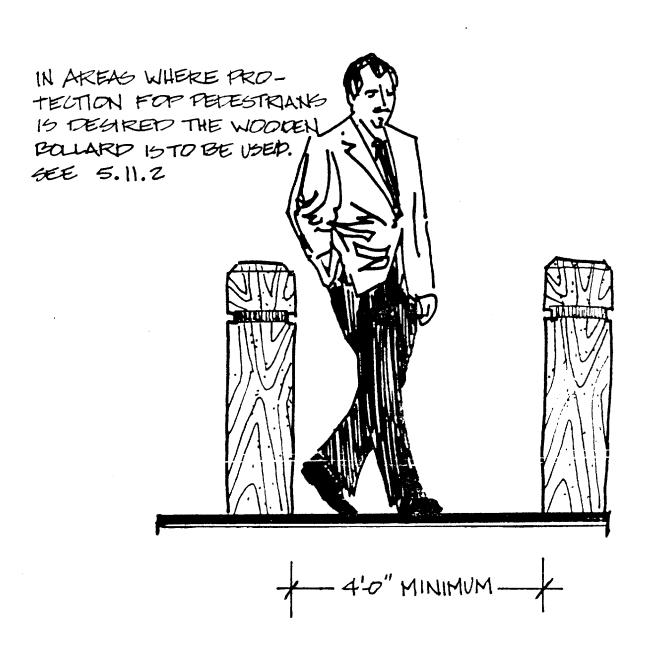
SIDEWALK FOLLOWS DIRECTION OF PETESTRIAN. PATH.

4.11.2

AR LA CE ME SE EE

PEDESTRIAN CONTROL

SHEET 2/2



4.12.1 ADM, CF, MS, HSG, OS, IND

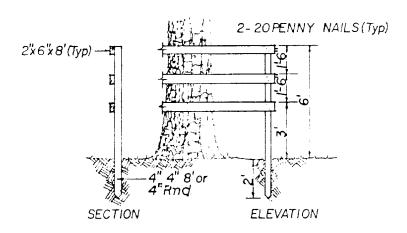
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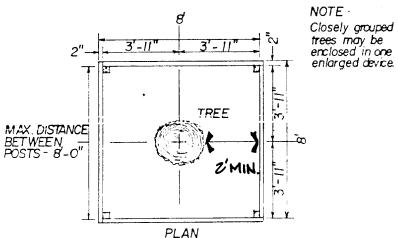
### PROTECTION & CLEARING

#### SHEET 1/7

#### TREE PROTECTION

New development on Post will make a conscious effort to preserve existing vegetation and protect it from damage during construction.





TREE PROTECTION DEVICE

4.12.1 ADM, CF, MS, HSG, OS, IND

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#### PROTECTION & CLEARING

SHEET 2/7

#### **DEBRIS REMOVAL**

Beside thinning and pruning, clean-up work shall consist of the removal of hazardous growth, dead, dying or diseased plant material, and all flammable material on the ground within 50 feet of the cleared edge of the woodlands.

Dying trees should include all trees which will not survive if left in their present condition and which cannot be saved by normal maintenance, pruning and care. Any tree with a 25 percent dead crown, unless otherwise marked for saving, should be considered a dying tree and removed.

All trees to be removed should be cut as close as possible to the ground (no higher than 3 inches) and felled so as to avoid damaging adjacent material. In order to control regrowth of undesirable material, remaining stumps 3 inches or more in diameter should be painted or sprayed within two weeks after cutting with a mixture of 1 part herbicide (such as 2, 4-D or 2, 4, 5-T) and 19 parts fuel oil. Do not use kerosene because of its toxicity to desirable plants and its flammability. Care shall be taken to not spray or paint vegetation to remain.

All undesirable undergrowth should be removed and trees should be cleared of vines.

Remove all previously fallen trees and branches. Clear and grub all uprooted and dead tree stumps.

Any stumps and roots in high visibility areas, or in the Administrative, Community Facilities, Housing or built up Mission Support Zones will be removed to a depth of 8 inches below surrounding grade.

4.12.1 ADM, CF, MS, HSG, OS, IND

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PROTECTION & CLEARING

SHEET 3/7

DEBRIS REMOVAL



BEFORE CLEAN-UP WOODLANDS ARE LITTERED WITH FALLEN TREES & BRANCHES, UNDESIRABLE UNDER-AROWTH, & GENERAL DEBRIS.



AFTER CLEAN-UP ONLY DESIRABLE VEGETATION REMAINS.

4.12.1 ADM, CF, MS, HSG, OS, IND

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#### PROTECTION & CLEARING

SHEET 4/7

#### THINNING

Wooded areas shall be thinned out to provide space for healthy growth by the elimination of thinner, weaker trees and the reduction of the number of varieties. Thinning of woodlands involves the removal of tree branches and of groups and individual trees which interfere with the growth of more desirable types of trees; the clearing away of lesser growth that may obscure outstanding trees, tree groups, or scenic views; and clearing for paths.

Thinning should be done on the basis of space available for crown development. Thinning allows sunlight to penetrate between the tops of the trees that remain in the stand. Examine the stand tree by tree and mark those trees to be removed.

Crown thinnings are recommended for 50' inside the woodlands that line major entry roads and those roads in recreation areas of open space. Thin the stand from the top down, removing poorer branches to favor other limbs that are more vigorous and of better form.

Prune trees three inches in caliper and up. Pruning and thinning work shall apply to the full height of affected trees. Prune all dead, diseased or dying branches and all interfering or structurally weak branches that impede vigor of plant. This will include the satisfactory removal and disposal of all debris material generated.

Understory trees which line the edges of forests are to be preserved and encouraged. Often the promotion or 'sealing' of these edge conditions can preclude the thinning of the adjacent woods.

4.12.1 ADM, CF, MS, HSG, OS, IND

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PROTECTION & CLEARING

SHEET 5/7

THINNING



BEFORE THINNING



AFTER THINNING

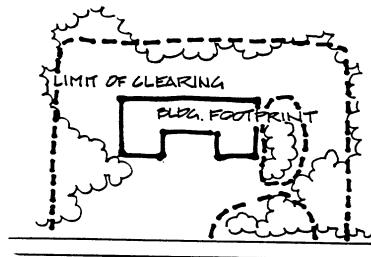
4.12.1 ADM, CF, MS, HSG, OS, IND

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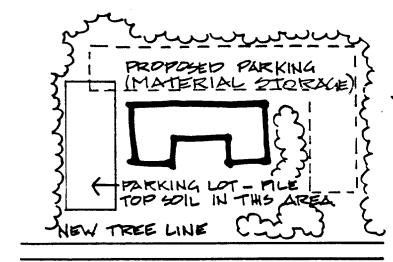
PROTECTION & CLEARING

SHEET 6/7

#### **CLEARING**



BUILDINGS SHOULD BE SITED TO PRESERVE AS MUCH EXISTING VEGETATION AS POSSIBLE - ESTABLISH A LIMIT OF CLEARING LINE.



EXISTING TREES ENHANCE ARCHITECTURE AND PRO-VIDE SHADE.

4.12.1 ADM, CF, MS, HSG, OS, IND

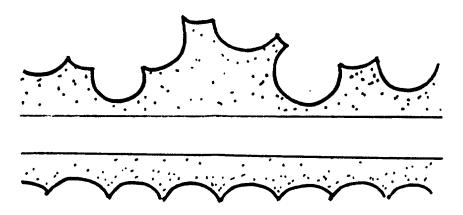
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#### PROTECTION & CLEARING

SHEET 7/7

WHEN CLEARING FOR ROADS - A STRAIGHT EDGED TREE LINE 15 UNDESTRABLE. A VARIED EDGE 15 MUCH MORE DESTRABLE. THIS GIVES ADDED INTEREST TO THE ROAD-HELPS PREVENT MONOTONT. USE UNDERSTORT SPECIES TO SEAL'THIS NEW EDGE INTO A NATURAL CONDITION.

#### ACCEPTABLE ROAD TREATMENT



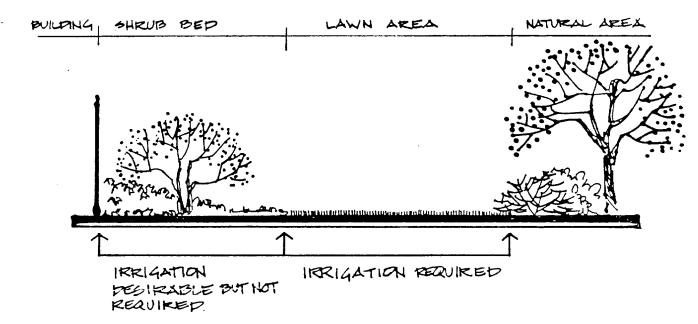
UNACCEPTABLE TREATMENT

4.13.1 ADM, CF, MS, HSG, OS, IND

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IRRIGA	TION			SHE	EET 1/2

Areas requiring irrigation include administration buildings, community facilities, along shoulders and medians of major roadways and entrances, and other highly visible and important areas.

Irrigation in these places should be limited to lawn areas and important plantings such as foundation plantings, accent flower beds, and specimen plants. Lawn or turf in these areas must be irrigated.



All sprinkler heads used in lawn or turf areas should be 3 inch pop-up type.

Low shrubs, flower or annual beds, and groundcovers are areas where a 6 inch or 12 inch pop-up head should be used. The height of the pop-up head is determined by the maximum height of the plant material being irrigated.

Spray heads should be mounted on shrub risers of heights from 12 inches and up in areas where shrubbery is too tall for pop-up heads.

Shrubbery too tall for shrub risers should be irrigated with pop-up heads, as long as the lower branches are high enough to allow clearance for the spray.

4.13.1 ADM, CF, MS, HSG, OS, IND

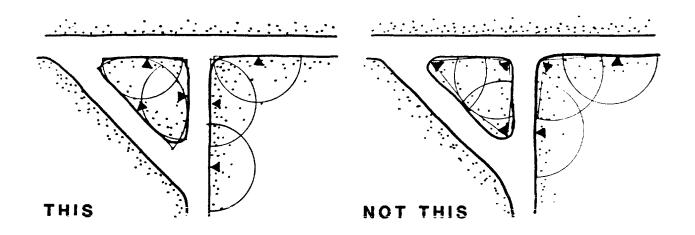
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#### IRRIGATION

SHEET 2/2

Careful placement of sprinkler heads will minimize over-spraying and accidental damage to the heads.

Sprinkler heads should be placed a minimum of 12 inches from curbs to prevent tire damage to the head. Sprinkler heads can be placed next to walks as long as they are not located where a short cut may occur.



Quarter arc, adjustable arc, strip sprays, and other special spray pattern nozzles should be used in small or oddly shaped planting areas to prevent spraying on pavement or adjacent structures. In addition, the radius on most heads can be field adjusted to prevent wasteful over-spraying on pavement.

Caution should be exercised when installing irrigation systems near existing plant material. Pipe lines should be routed around root zones of existing plants. Trenches within the dripline of existing trees should be hand dug to prevent unnecessary damage to the tree.

4.14.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

**PRUNING** 

SHEET 1/4

Pruning removes dead, diseased, injured, broken, rubbing, and crowded limbs. The arrangement, attachment, and size of scaffold branches is controlled through proper pruning. Pruning should take advantage of the plant's growth habit, accentuating its natural tendencies.







#### **IMPROPER PRUNING**

- 1. TOO SLANTING -EXPOSES TOO MUCH HEARTWOOD
- 2. TOO LONG-WILL INTERFERE WITH BUD GROWTH
- 3. TOO SHORT-WILL CAUSE DIEBACK



#### PROPER PRUNING

IDEAL CUT - STARTS OPPOSITE BASE
OF BUD AND SLANTS UP TOWARD
TOP OF BUD. BUD FACES OUT FROM
CENTER OF PLANT. BRANCHES
SMALLER THAN YOUR THUMB MAY
BE REMOVED WITH SHARP HOOK &
BLADE SHEARS, USE LOPPERS &
SAWS FOR LARGER LIMBS.

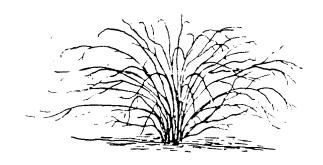
4.14.1 ADM, CF, MS, HSG, OS, IND

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**PRUNING** 

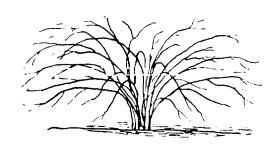
SHEET 2/4

Generally deciduous plants are pruned anytime during the dormant period. Deciduous plants that bloom in early spring are the exception because flower buds are set on the previous years growth. These species are pruned immediately after flowering; this is also true for azaleas. Evergreens are set back least if they are pruned just before spring growth starts.



#### **EXISTING SHRUB**

THIS SHRUB SHOWS AN ACCUMULATION OF CROWDED STEMS



#### PROPER PRUNING

SURPLUS STEMS REMOVED AT BASE. THIS GIVES NEW STEMS AN OPPORTUNITY TO DEVELOP FROM THE BOTTOM.



#### **IMPROPER PRUNING**

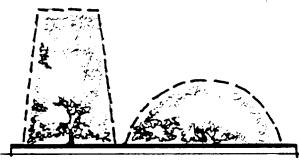
THIS DESTROYS THE
NATURAL SHAPE OF THE
FLANT AND ACTUALLY
REQUIRES MORE TIME.
TO PRUNE

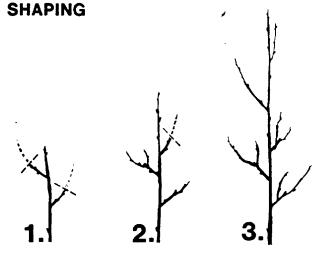
4.14.1 ADM, CF, MS, HSG, OS, IND

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#### **PRUNING**

SHEET 3/4



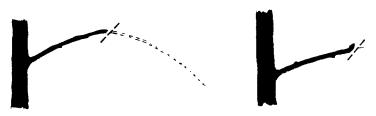


PLANTS THAT MUST BE SHAPED WILL RETAIN THEIR NATURAL FORM. HEDGES WILL BE WIDER AT THE BOTTOM SO SUNLIGHT WILL REACH LOWER LEAVES -THIS HELPS PREVENT LEGGINESS.

- 1. PRUNING AT PLANTING
- 2. INTERMEDIATE PRINING
- 3. LIMB STRUCTURE ESTABLISHED-EVENLY SPACED AROUND TRUNK

NOTE: THE LEADER WAS NEVER LUT







#### PROMOTING UPRIGHT GROWTH

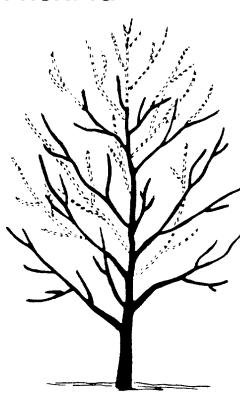
PRUNE BACK NEAR THE TOP OF AN ARCH. PRINE BACK TO AN LIPWARD FACING BUD. PRINE BACK TO AN UPRIGHT LATERAL LIMB.

4.14.1 ADM, CF, MS, HSG, OS, IND

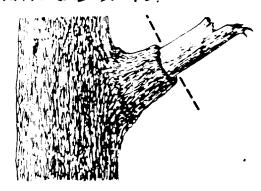
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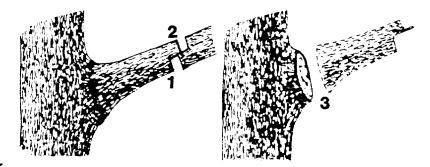
#### **PRUNING**

SHEET 4/4



YOU CAN REDUCE THE
HEIGHT AND SPREAD OF
ATREE AND MAINTAIN ITS
NATURAL SHAPE





REMOVE A LARGE LIMB BY MAKING THREE CUTS.

- 1. MAKE THE FIRST OUT ON THE BOT-TOM OF THE BRANCH 12-24 FROM THE BRANCH ATTACHMENT
- 2. MAKE THE SECOND OUT ON THE TOP OF THE BRANCH WITHIN I" OF THE UNDER OUT.
- 3. MAKE THE FINAL CUT JUST BETOND THE OUTER PORTION OF THE BRANCH COLLAR.

A DEAD BRANCH STUB THAT HAS A COLLAR OF LIVE WOOD SHOULD BE CUT JUST AT THE OUTER ETGE OF THE COLLAR & TREATED TO PREVENT DECAT & INSECTS FROM ENTERING INTERIOR WOOD.

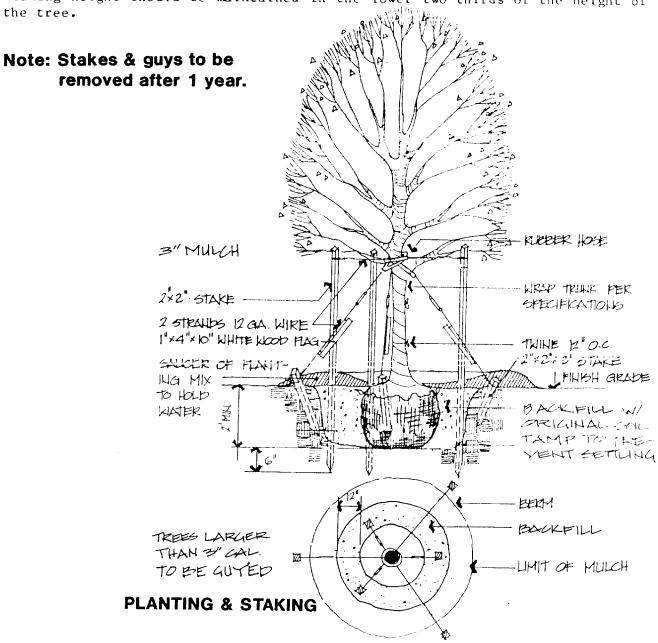
4.15.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE

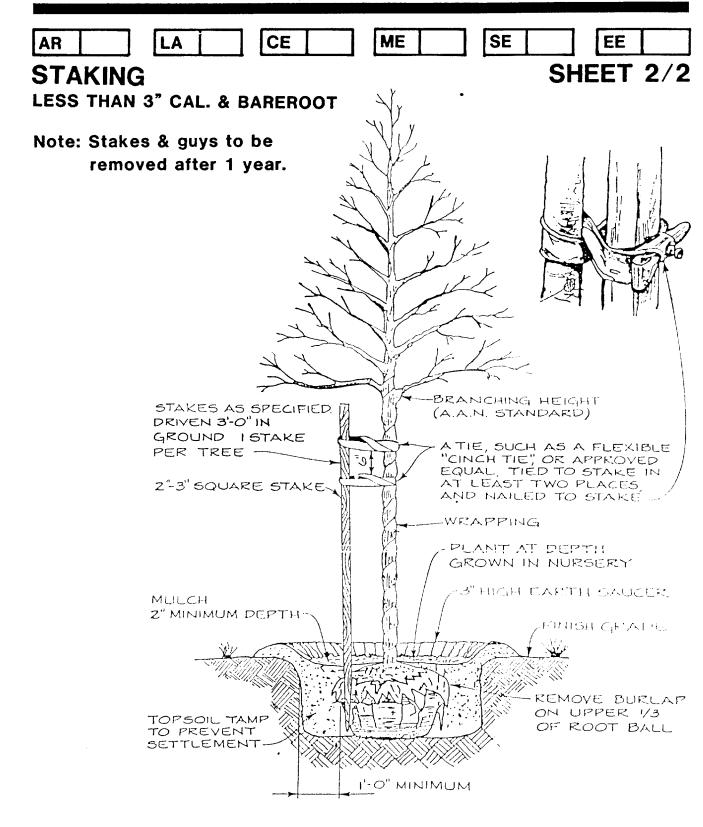
#### STAKING 3" CALIPER & LARGER

### SHEET 1/2

No staking is necessary for most shrubs and for many conifers and other trees with limbs close to the ground. Staking is needed for trees whose trunks are not strong enough to stand without support or to return upright after a wind. Staking height should be maintained in the lower two-thirds of the height of the tree.



4.15.1 ADM, CF, MS, HSG, OS, IND

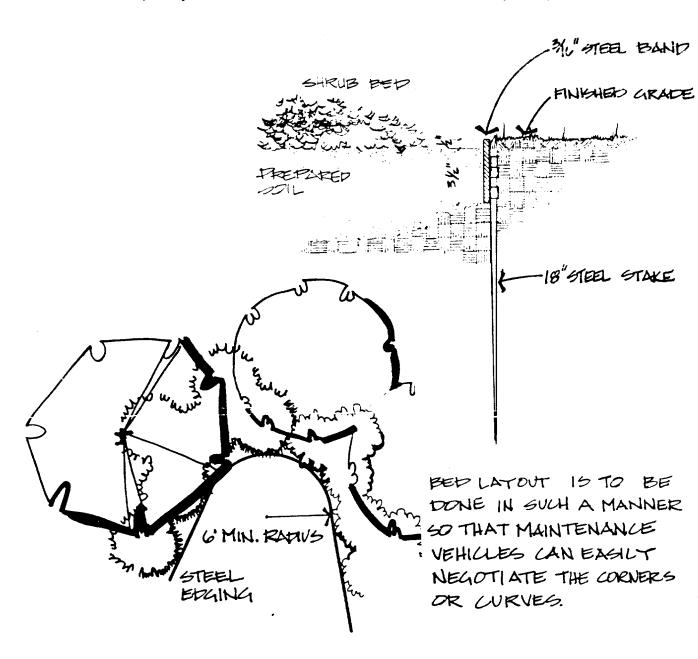


4.16.1 ADM, CF, MS, HSG, OS, IND

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#### **EDGING**

STEEL EDGING WILL BE USED THROUGHOUT THE POST.



4.17.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
LAWN				SH	<b>EET 1/2</b>

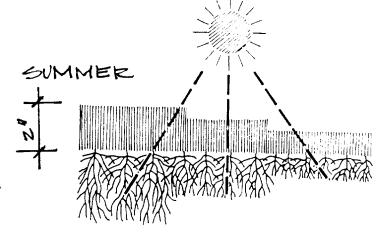
The establishment of a quality lawn is of primary importance in high visibility and Post housing areas. The basic steps in building a lawn are:

- 1. Test soil
- 2. Remove debris and rock
- 3. Control persistent weeds-this is usually done with a contact herbicide such as 'Roundup'.
- 4. Rough grade the site
- 5. Add soil amendments or topsoil if needed as determined by the soil test
- 6. Cultivate thoroughly to a depth of 8"-10"
- 7. Install underground irrigation where applicable
- 8. Fine grade the site-the ground should have a 2% slope away from buildings
- 9. Plant seed or sod-If sod is to be installed the final grade should be about 1" lower than the grade for a seeded lawn because of soil which comes with sod.
- 10. Lightly roll

After the lawn is established, its health and vigor will be a direct result of the amount and quality of maintenance it receives. Water regularly.

Improper mowing is responsible for the demise of many lawns. The grass should be mowed often enough so that only about a third of the leaf blade is removed at any one clipping. Bermuda grass should be kept at 1-1/2", during the summer this height is to be increased to 2". This allows for more shading of the root system which results in less weed seed germination and better conservation of soil moisture. When watering the lawn it should be done

GRASSBUADES THAT ARE CUT AT THE CORRECT HEIGHT SHADE GRASS ROOTS FROM MIDSUMMER HEAT THEREIST ENCOURAGING DEEPER, STUDIER ROOTS.

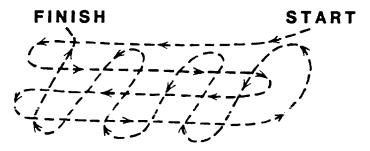


4.17.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
IAWN				CHE	FT 2/2

deeply. Light watering does not penetrate below the upper 2 or 3 inches of the soil, thereby encouraging roots to stay near the surface where moisture is available. Deep watering encourages roots to grow deep. There is more natural moisture in the subsoil, roots encouraged to penetrate deeply will, in time, become more self-sufficient, and less dependent on manual watering.

Fertilizing provides nutrients to plants, helping them make vigorous healthy growth. The principal fertilizing elements are nitrogen, phosphorous, and potassium. Any fertilizer containing all three is called a "complete fertilizer." In addition to those three most fertilizers also contain calcium, magnesium, boron, zinc, and a number of other minor fertilizing elements called trace elements. The best fertilizers are those that release plant nutrients slowly and evenly over a long period of time. Usually bermuda grass requires from 6-12 pound's of nitrogen, 2-4 pound's of phosphorous, and 4-8 pound's of potassium a year.



METHOD OF APPLYING SEED AND FERTILIZER

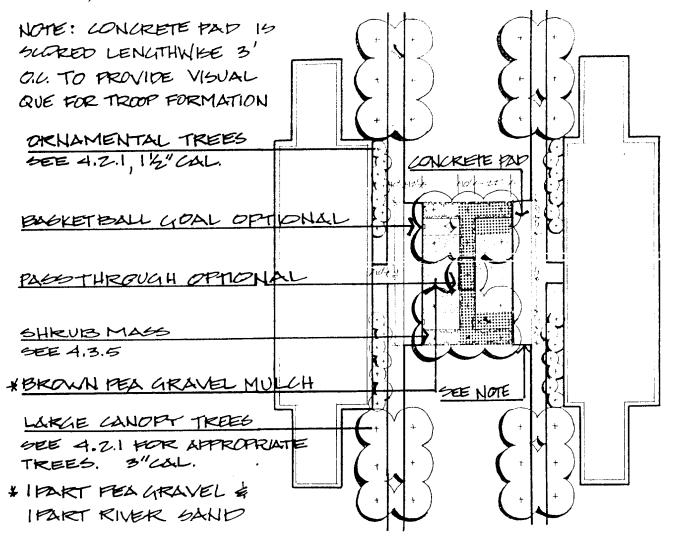
DIVIDE THE SEED OR FERTILIZER IN HALF; HEN, DISTRIBUTE HALF IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE FIRST, AS INDICATED ABOVE.

4.18.1

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#### **OUTDOOR LOUNGE AREAS**

The outdoor lounge areas in the troop barracks areas will be standardized to provide an aesthetically pleasing passive use area. Walks in the Mission Support areas will be at least 10 feet wide. A standard 12 x 90 feet concrete pad is added to provide a place for unit formations. The lounge areas will be at least 50 x 22 feet with the option of being enlarged to 70 x 22 feet. In the drawing, the gray area demonstrates an alternative way to landscape an area for one barracks. If both barracks are present and both require an outdoor lounge area, the middle portion (labeled on drawing) may be graveled to allow a pedestrian pass through. Site furnishings in those areas will be standard; see Section 5.



# **DESIGN ELEMENTS MATRIX**

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6. 7. 8. 9.

12. 13.

14. 15. 16. 17. 18.

19. 20. 21.

5. Site Furnishings	DISCIPLINE			LAND USE ZONE								
	AR	LA	CE	<b>M</b> E	SE	EE	ADM	CF	MS	HSG	os	IND
General Information	_		_	_		_	1	1	1	1	1	1
Bench	╅	$\vdash$	$\dashv$				1	1	2	2	2	2
Wall	1		_				1	1	1.2	1.2	1	1.2
Retaining Wall							1,2	1,2	1,2,3	1,2,3	1,2,3	1,2,3
Fence							1.3	1,3	1.3	1,2,3	1.3	1.3
Game Table & Seats	4-						_1	1		1	1	1
Picnic Table	4_									1		
Shelter/Kiosk System	4-	-					-		1 2	2	1.2	2
Drinking Fountain	╂	-		-		· -	1	1	1 2	1	1	1
Trash Receptacle Bollard	+	ŕ			-	-	1	1	$\frac{1}{1,2}$	2	1,2	2
Lawn Edger	1				_				1		1	
Guard Rail	1								1,2	1	1	1,2
Sign Post Base	1	$\Box$					1	1	1	1	1	1
Bicycle Rack	1						1	1	1,2	2	1,2	2
Dumpster Enclosure							1	1	1	1	1	1
Mail Boxes							1	1	1	1		1
Playgrounds								1		1	1	
Monuments & Plaques	1_						1	1_	1		1	-
Flagpoles			-				1	1	1	11	11	1
Guide on Stand								Т	1			<u>+</u>
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5.1.1 ADM, CF, MS, HGS, OS, IND

	AR		LA	CE	ME	SE	EE
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#### GENERAL INFORMATION

The wide variety of furnishings that exist on Post can be a major unifying element. The following group of standard features are intended to tie distant and dissimilar areas of the installation together. They are compatible with each other as well as with the architectural standards of this guide. Substitutions will be considered on a case by case basis.

In some situations, in particular Land Use Zones, two or more alternatives for the same item are permitted. In most cases general guidance is given for the selection of alternatives with the determining factor being the surrounding context for that particular item. Follow this lead.

The following standards are generic in nature and suggest materials that are widely available as manufactured items. Specific products have been avoided, but such items if proposed, will be considered on a case by case basis.

In the location or siting of any item, a consideration of likely or practical use is to be made. Items are to be grouped, and handicapped considerations are to be made. Dual functions for design elements are to be considered in all applications.

Due to the high rate of change in building and area uses on Post, furnishings are to be demountable for easy relocation wherever possible. This will assist in maintenance efforts as well. Generally, materials are to have natural finishes, such as unpainted wood or concrete, to reduce maintenance requirements.

The paving and base materials for each application is to match that of adjacent paving materials. In cases where the existing pavement is broken or substandard it is to be replaced.

The standard finishes for all site furnishings shall be as follows; Concrete - Federal Standard 595-A #33717, cream color is to be integrated into the mix. Existing concrete is to be sand blasted to a natural finish.

Metals - Painted/baked enamel Fed. Standard 595-A #20059, or finish is to be bronze anodized aluminum.

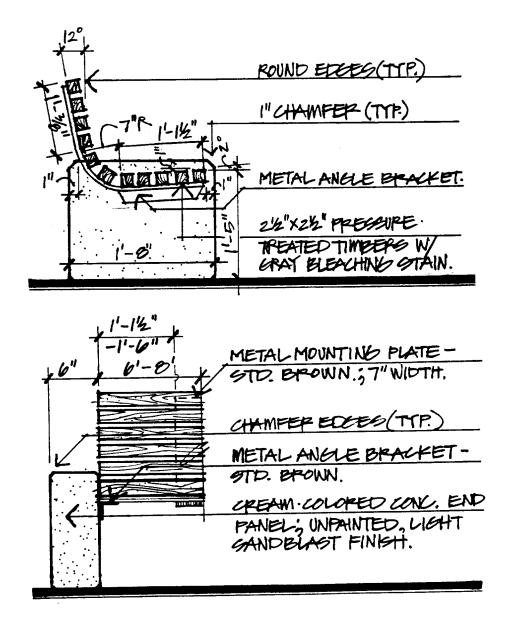
Woods - Federal Standard 595-A #20059, dark brown semi-gloss enamel or flat solid type stain.

All wood is to be pressured treated Southern Yellow Pine or as supplied by manufacturer and stained on Post or at site.

5.2.1 ADM, CF

AR	LA	CE	ME	SE	EE
BENCH	WITH BACK	(		SH	<b>IEET 1/2</b>

Use this backed bench in outdoor park/long term seating situations. Groupings of this bench are recommended to stimulate leisure time conversations.



5.2.1 ADM, CF

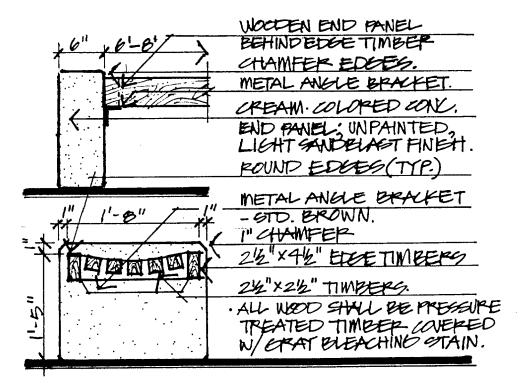
AR	LA	CE	ME	SE	EE

BENCH WITHOUT BACK

SHEET 2/2

Use this backless bench in short term seating situations such as at drop off or entry areas and as a less expensive supplement for established long term seating areas.

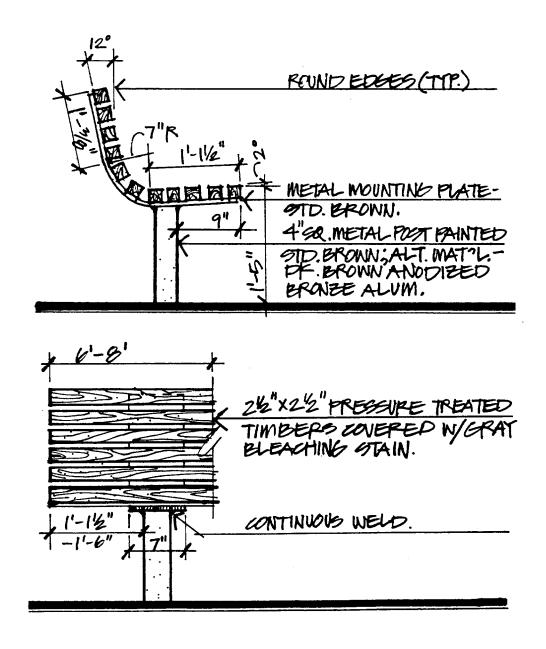
Locate benches to take advantage of attractive views and likely users' access and needs. Do not allow benches to encroach upon or crowd walkways, and do allow room for strollers, bikes and possible future site furnishings alongside each bench.



**5.2.2** Ms, Hsg, os, IND

AR	LA	CE	ME	SE	EE
BENCH	WITH BAC	K		SH	EET 1/2

Use this backed bench in outdoor park/long term seating situations. Groupings of this bench are recommended to stimulate leisure time conversations.

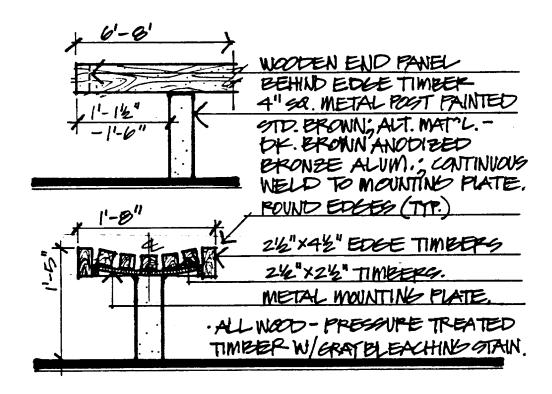


5.2.2 MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE	
BENCH	WITHOUT	BACK		SI	HEET	2/2

Use this backless bench in short term seating situations such as at drop off or entry areas and as a less expensive supplement for established long term seating areas.

Locate benches to take advantage of attractive views and likely users' access and needs. Do not allow benches to encroach upon or crowd walkways, and do allow room for strollers, bikes and possible future site furnishings alongside each bench.



5.3.1 ADM, CF, MS, HSG, OS, IND

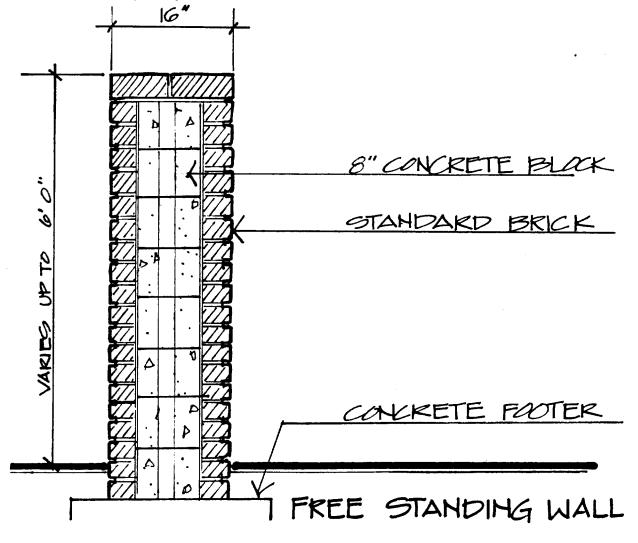
AR	LA	CE	ME	SE	EE	
				_		

#### WALL

SHEET 1/2

This freestanding brick wall may be used in all Zones and can be up to six feet in height. If used as a seat wall the height should be from 16 to 18 inches.

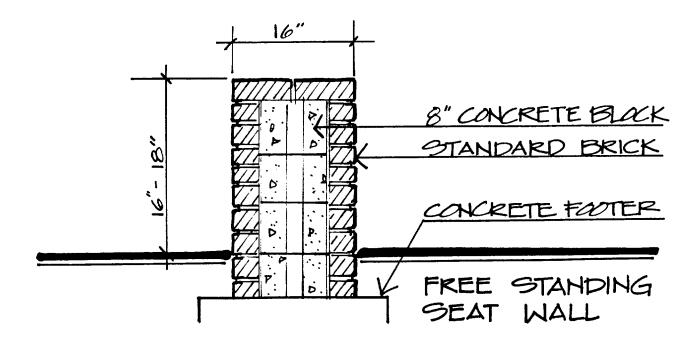
Use this wall for security, noise abatement, or as an architectural screen where needed. When built adjacent to a building, the brick types are to match as closely as possible.



5.3.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE	
WALL				SHE	ET 2/	2

The brick seat wall may be used in all Zones and may be used in conjunction with the freestanding brick wall shown on Sheet 1. The recommended height is 16 to 18 inches. Use this wall to form planters or as shown in 5.4.3 Retaining Wall. When built adjacent to a new building, the brick types are to match that building as closely as possible.

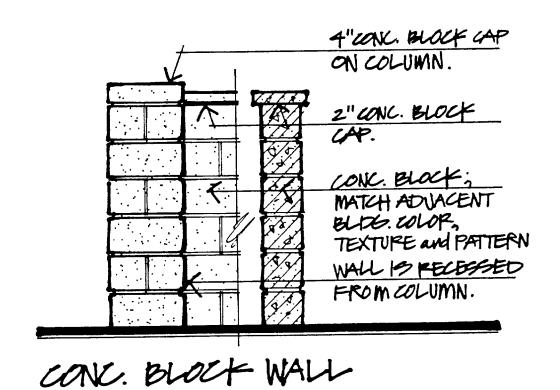


5.3.2 Ms, Hsg, IND

AR	LA	CE	ME	SE	EE
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## WALL

This free standing block wall is to be used as a screen, or for security purposes in the Mission Support, Housing and Industrial Land Use Zones. When used adjacent to structures that utilize a stucco or stucco like finish, this wall may be covered with a material that is similar in both color and texture.



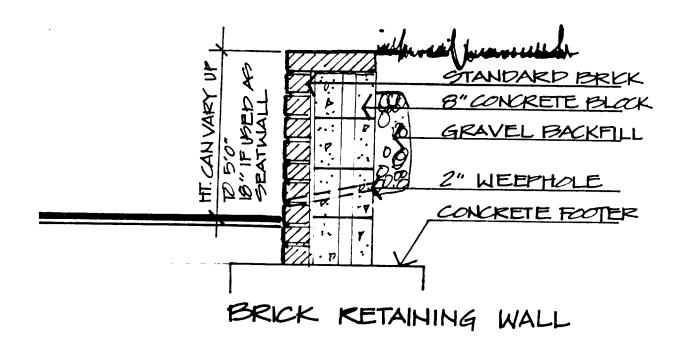
ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
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## **RETAINING WALL**

This brick retaining wall may be used in all Zones and can be up to five feet in height. If used as a seat wall the height should be from 16 to 18 inches.

If height is greater than 24", engineering approval is required.



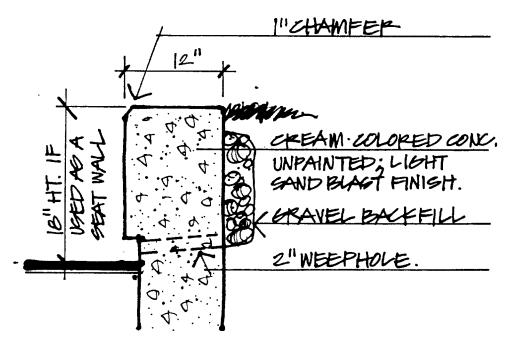
ADM, CF, MS, HSG, OS, IND

AR LA	CE	ME	SE	EE
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### RETAINING WALL

The concrete retaining wall is unlimited in height, and may be used in all zones. If used adjacent to structures that utilize a stucco or stucco like finish, this wall may be covered with a material that is similar in both color and texture.

If height is greater than 24", engineering approval is required.



CONC. RETAINING WALL

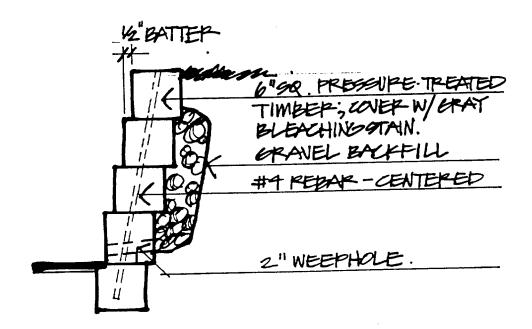
5.4.3 MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
	<u> </u>				·

### RETAINING WALL

This treated wood retaining wall may be used to a height of five feet only, and only in the Mission Support, Housing, Open Space and Industrial Land Use Zones.

If height is greater than 24", engineering approval is required.



WOODEN RETAINING WALL

5.5.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
				_	

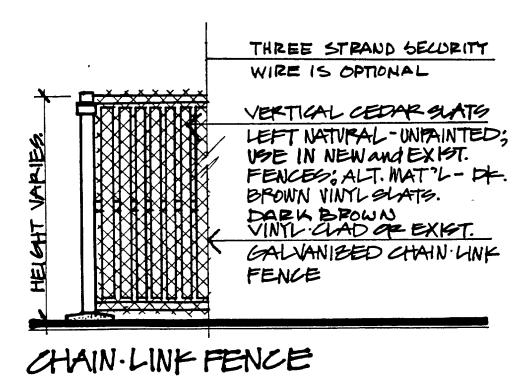
#### **FENCE**

SHEET 1/2

This utility/security fence is to be used in high visibility areas of all Land Use Zones where physical security is required. The three strand security barbed wire is to be used as needed.

All such fencing in the Administration, Community facilities, Housing and Open Space Land Use Zones is to be vinyl-clad. Existing fences in these zones are to be painted, replaced, or the mesh fabric is to be replaced with vinyl-clad fabric and all other posts and hardware painted standard dark brown.

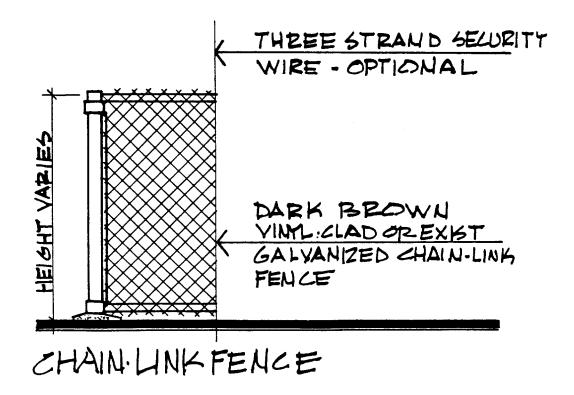
All such fencing in the Industrial and Mission Support Land Use Zones shall receive the same treatment only at points of entry and administrative/head-quarters/high visibility areas. All other fences in these zones will be galvanized.



5.5.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
FENCE	·			SH	<b>EET 2/2</b>

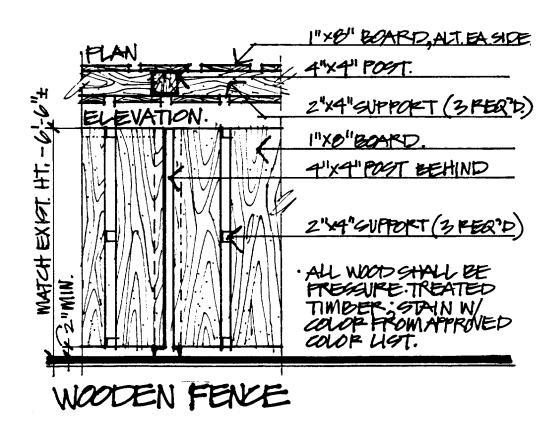
All perimeter fencing shall be galvanized except at major entries where it shall be vinyl coated for a distance of two hundred feet (200') on both sides of the gate. The use of higher design quality walls and fences is encouraged at these gate areas.



5.5.2

AR	LA	CE	ME	SE	EE	
FENCE				SHE	ET	1/2

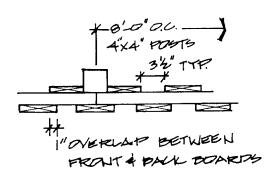
This wooden fence is to be used in all residential applications and shall be stained in accordance with the color guide in Section 1, buildings and courtyards.

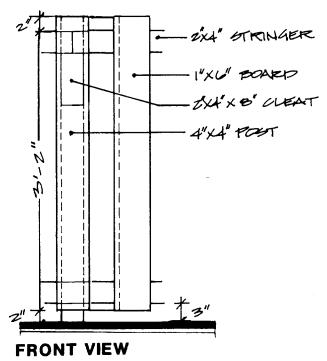


5.5.2

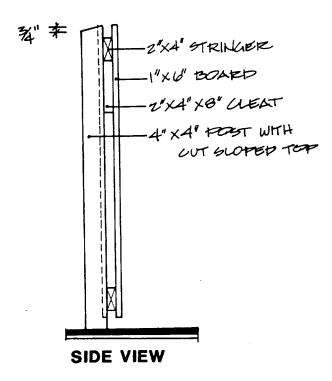
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AR	LA	CE	ME	SE	EE	
EENCE				SHI	EET 2/	<u>2</u>

This wooden fence is to be used for temporary fencing in residential areas. The panels are standardized to allow prefabrication. All wood will be stained brown #20059, Federal Standard 595a. Top of posts are to be leveled as shown to insure water run-off.





TEMPORARY FENCE

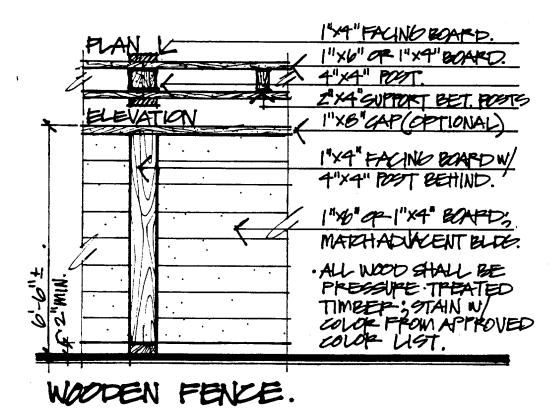


5.5.3 ADM, CF, MS, HSG, OS, IND

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### **FENCE**

This wooden fence is to be used in conjunction with all temporary wood frame buildings with horizontal siding now in use on Post.

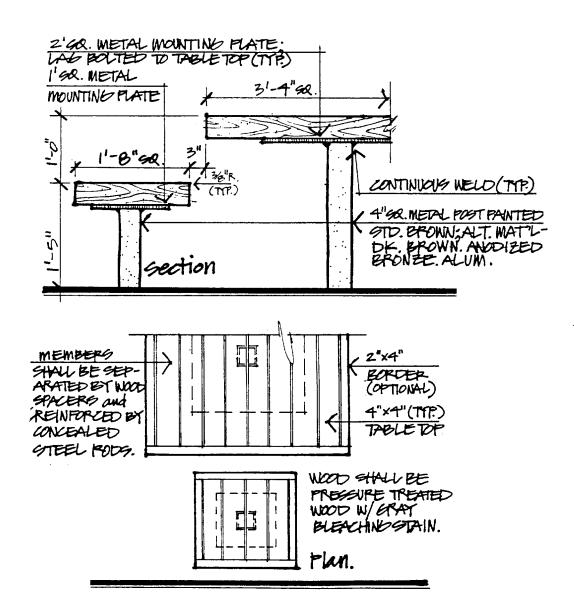


5.6.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE	
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### **GAME TABLE & SEATS**

This game table with seats is to be used in outdoor recreation and employee seating areas where users regularly gather at lunch time or during leisure hours. In groupings of three or more, one table shall have only three seats leaving the fourth side open for handicapped access.

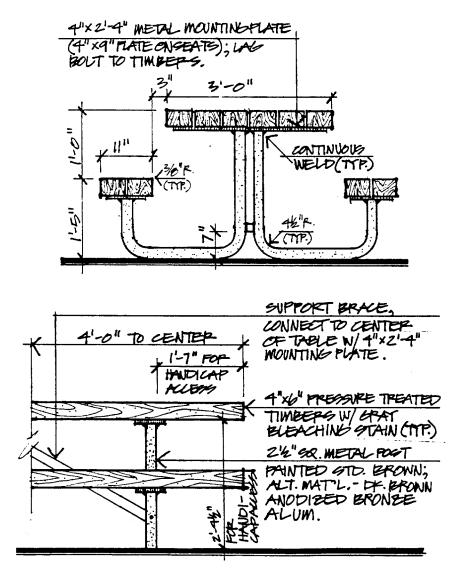


5.7.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE

## PICNIC TABLE

This table is to be used in all Land Use Zones as required. All edges and corners are to have a minimum 3/8" radius and be free of cracks and splinters. In groupings of 3 or more tables, one end of one table is to be extended 1'-6" for handicapped access, and that table is to be located on a paved or smooth surface.



5.8.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
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### SHELTER/KIOSK SYSTEM

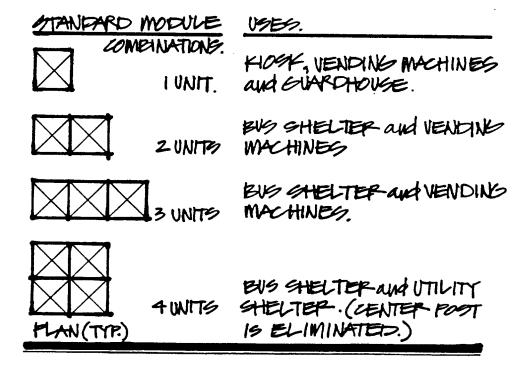
SHEET 1/3

This multi-purpose modular system is readily available from a variety of manufacturers or can easily be fabricated on Post. The basic system is of 3" x 3" tubular metal posts with an aluminum or fiber glass roof system.

The units are to be used for weather protection as bus stops, school bus stops, equipment covers and as guard booths. Larger groupings may be practical as playground pavilions with the acrylic side panels removed. An additional use is as information kiosks in high traffic pedestrian areas.

Streetside locations should allow for adequate safe access for pedestrians by setting back a minimum of four feet from curb.

The standard bench and trash receptacle is to be used in conjunction with two, three and four unit combinations.



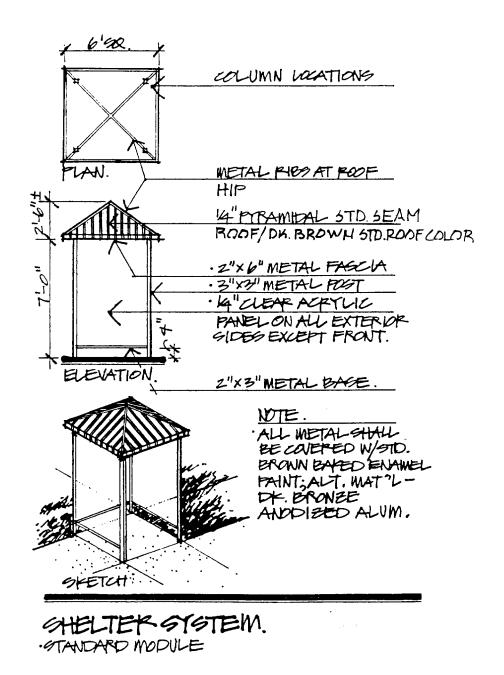
5.8.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE

## SHELTER/KIOSK SYSTEM

SHEET 2/3

It is recommended that in cases of existing structures, this roof system be applied. This will help to unify the appearance of such structures on Post without unnecessary expense. In some cases the acrylic wind screens should also be applied.



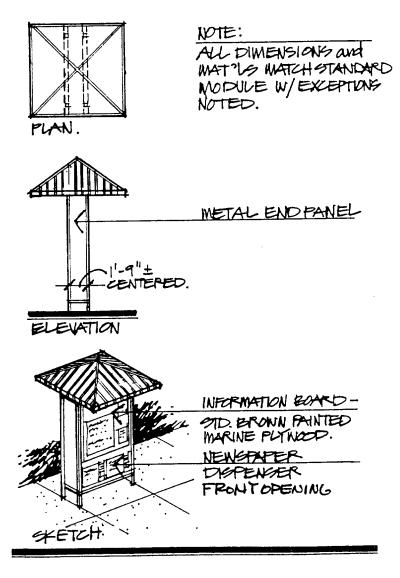
5.8.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE

## SHELTER/KIOSK SYSTEM

SHEET 3/3

This kiosk/bulletin board system has a variety of uses, including basic information boards, pedestrian scale marquees for community facilities, dispensing racks, telephones, or as formal graphic displays for Post or Small Area directory maps.



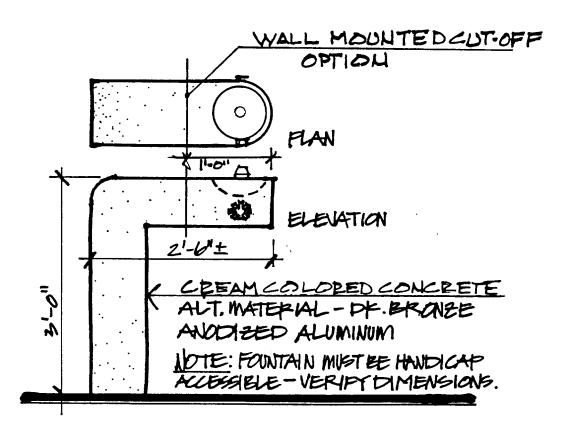
5.9.1 ADM, CF, MS, OS

AR	LA	CE	ME	SE	EE
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### **DRINKING FOUNTAIN**

Locate fountains in high traffic areas and outdoor gathering areas. Fountains are to have paved bases large enough to accommodate wheelchairs without blocking traffic on the adjacent walk. Fountains must be located near adequate existing water lines. In playground and community facilities areas stepping blocks for children are required.

## NOTE: PROVIDE SUBSURFACE DRAIN VALVE FOR WINTERIZING



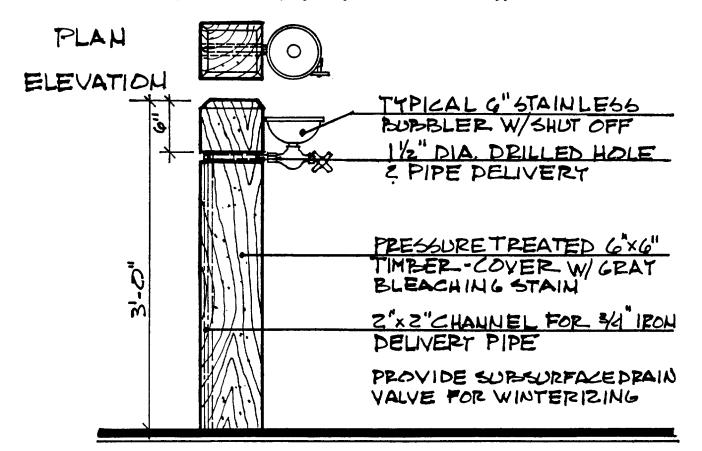
5.9.2 Ms, Hsg, Os, IND

AR	LA	CE	ME	SE	EE

### DRINKING FOUNTAINS

Locate fountains in high traffic areas and outdoor gathering areas. Fountains are to have paved bases large enough to accommodate wheelchairs without blocking traffic on the adjacent walk. Fountains must be located near adequate existing water lines. In playground and community facilities areas stepping blocks for children are required.

This alternate utility fountain is to be used in low visibility and remote areas of Housing, Industrial, Open Space and Mission Support Land Use Zones.

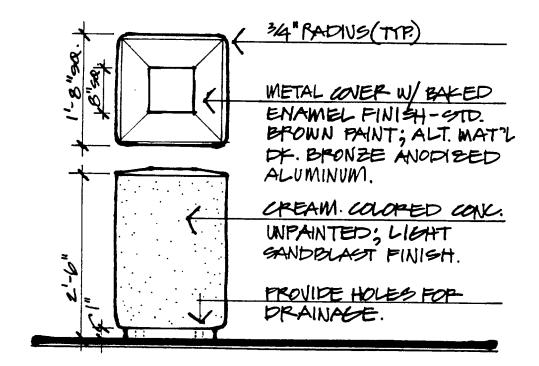


5.10.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
		<u> </u>			

## TRASH RECEPTACLE

This precast concrete container is to house a plastic liner can and the removable cover is to be attached by cable or chain to the main housing. An alternate utility trash receptacle made of recycled or new, undented, cleaned oil drums is permitted in low visibility areas of the Industrial, Open Space, and Mission Support Land Use Zones, and in enclosed service areas of all Zones. Such cans are to be painted a standard dark brown, high gloss enamel paint. A 3" white reflective stripe is to be applied immediately above the upper section band of each can.



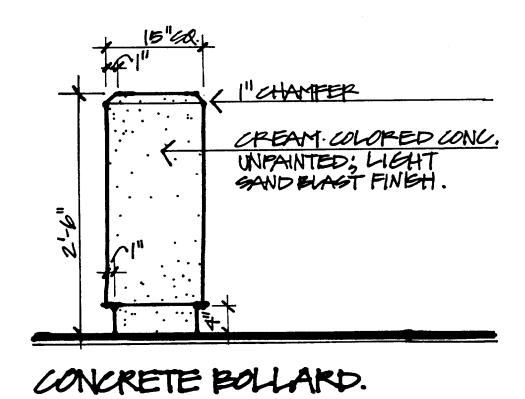
5.11.1 ADM, CF, MS, OS

AR	LA	CE	ME	SE	EE

#### **BOLLARD**

Bollards are to be used as vehicular/pedestrian traffic separators in areas where the designer deems this necessary, and to define plaza and memorial spaces. The use of a two inch diameter hole drilled six inches from the top to hold a one inch minimum dark bronzed or painted chain is permitted.

Bollards are to be set a minimum of eighteen inches below grade and provisions should be made for emergency access into controlled areas.



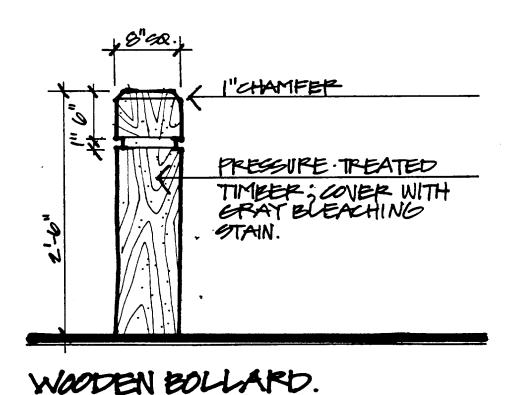
5.11.2 MS, HSG, OS, IND

AR LA	CE	ME	SE	EE
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### **BOLLARD**

Bollards are to be used as vehicular/pedestrian traffic separators in areas where the designer deems this necessary, and to define plaza and memorial spaces. The use of a two inch diameter hole drilled six inches from the top to hold a one inch minimum dark bronzed or painted chain is permitted.

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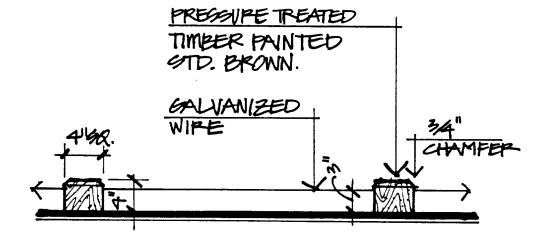
5.12.1 MS.OS

AR LA	CE	ME	SE	EE
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## LAWN EDGER

Use this pedestrian control device along walkways in barrack areas to define space and protect lawns. The alternate method for controlling pedestrian movement is through well planned circulation systems that respond to trip origination/destination requirements, and through the use of groundcovering plant materials at intersections and obvious points of departure from walks.

Posts are to be set a minimum of 12" into the ground with the wire being tightly stretched and anchored.



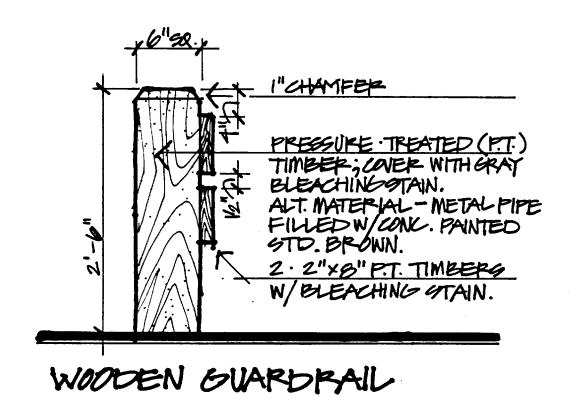
5.13.1 MS, HSG, OS, IND

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#### **GUARDRAIL**

Guardrails are to be used in parking and other areas to define and control where vehicles are permitted to travel. This guardrail is not intended as a highway safety device. An additional use is to separate pedestrian from vehicular traffic.

Posts are to be set a minimum of two feet into the ground with rails facing vehicular traffic areas.



5.13.2 MS, IND

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### **GUARDRAIL**

Guardrails are to be used in parking and other areas to define and control where vehicles are permitted to travel. This guardrail is not intended as a highway safety device. An additional use is to separate pedestrian from vehicular traffic.

Posts are to be set in concrete a minimum of two and one half feet into the ground.

ROUND METAL PIPE PAINTED

OTD. BROWN OR GILVER; WIDTH,
HEIGHT AND PIPE DIA. TO WATCH
EXISTING; FOR USE IN INCUSTRIAL
AREAS. IN MISSION SUPPORTAREAS.

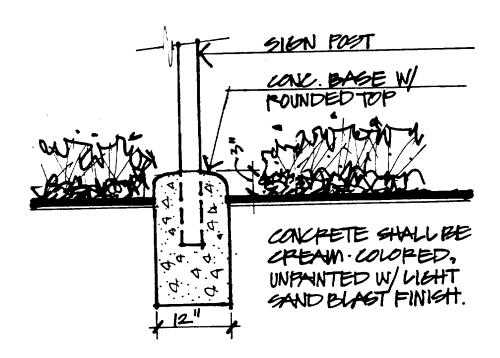
5.14.1 ADM, CF, MS, HSG, OS, IND

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### SIGN POST BASE

All sign posts are to be set into concrete bases that are a minimum of 12" in diameter. Setting depth shall be determined by the size of the sign in question but is to be a minimum of two feet.

All signs are to be located in landscaped beds wherever possible to minimize trimming requirements and the concrete base is to be raised three inches above grade.



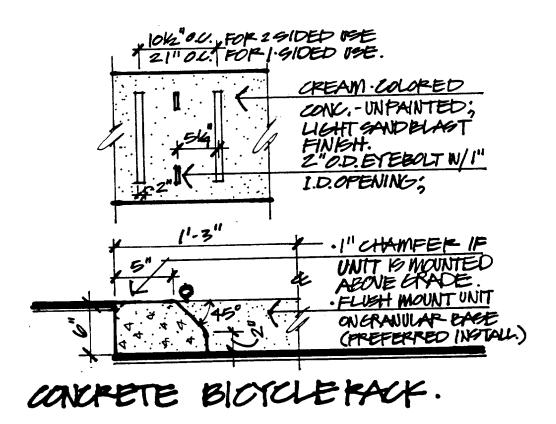
5.15.1 ADM, CF, MS, OS

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## **BICYCLE RACK**

Bicycle storage areas are to be located near building and use area entrances. Leave adequate space for pedestrian circulation.

All such storage areas are to be in view of nearby street or adjacent buildings for security reasons.



5.15.2 MS, HSG, OS, IND

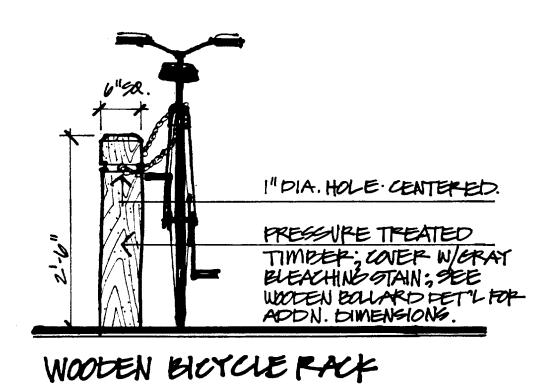
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## **BICYCLE RACK**

Bicycle storage areas are to be located near building and use area entrances. Leave adequate space for pedestrian circulation.

All such storage areas are to be in view of nearby street or adjacent buildings for security reasons.

Posts are to be set a minimum of two feet into the ground.



5.16.1 ADM, CF, MS, HSG, OS, IND

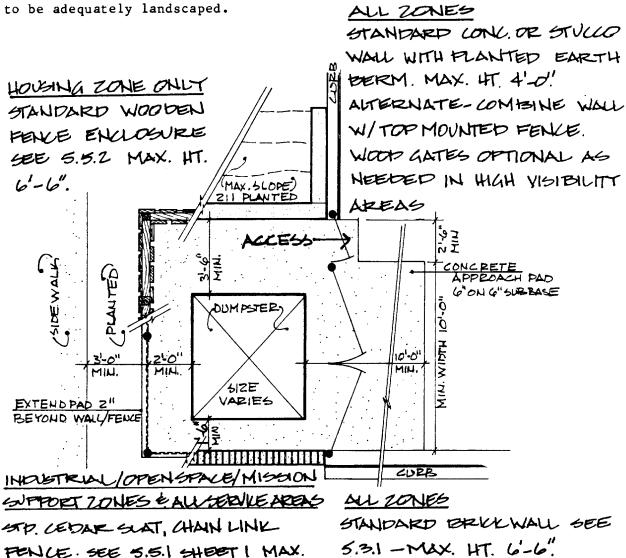
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### **DUMPSTER ENCLOSURE**

LIT. 6-6" W/O SEWRITT WIRES.

SHEET 1/2

Dumpsters, and group storage of garbage cans shall be concealed on a minimum of 3 sides by the use of walls, fencing, earth berms, landscape planting or any combination of these materials. Material selection is to be compatible with adjacent architectural styles and materials and site conditions. Doors will be used as optional equipment when space and location options require the dumpster to be placed in a highly visible area. All such enclosures are



5.16.1 ADM, CF, MS, HSG, OS, IND

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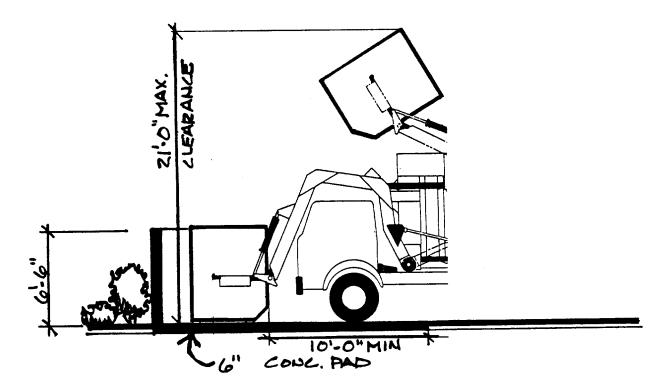
### **DUMPSTER ENCLOSURE**

SHEET 2/2

Dumpsters are to be conveniently located to the facility they serve, near side or rear entries, and away from active walkways or main roads. They are to have adequate maneuvering room to allow access and service by large trucks.

All dumpsters are to be placed on standard 6" concrete pads large enough to accommodate the front wheels of the service vehicle. They should provide adequate height/overhead clearance, and not be placed near bedroom or classroom windows.

All bulk refuse containers/compactors are to be located in rear service areas on loading docks, and should generally be screened from view.



5.17.1 ADM, CF, MS, HSG, IND

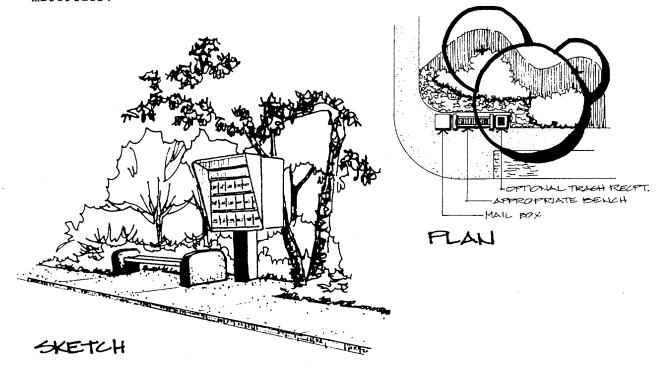
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### MAIL BOXES

All mailboxes are to be located near the front door(s) of the unit(s) they serve along the line of travel from parking areas to the most used building entrances. Types of boxes used must be approved by the U.S. Postmaster General.

When required, 'Group' or 'Gang' mailboxes shall be placed in convenient central locations and with other site furnishings such as bus stops, bulletin boards, benches and trash receptacles. Approved types of group mailboxes shall be bronze anodized aluminum or painted standard dark brown semi-gloss, 20059, Federal Standard 595-A, or 476, Pantone Matching System, enamel and clearly marked 'Mail' or 'United States Mail'. All such groupings of site furnishings are to be on paved surfaces adjacent to but not encroaching upon sidewalks. These groupings will be heavily landscaped.

All materials are to be compatible with that of surrounding buildings and materials.



5.18.1 cf, hsg, os

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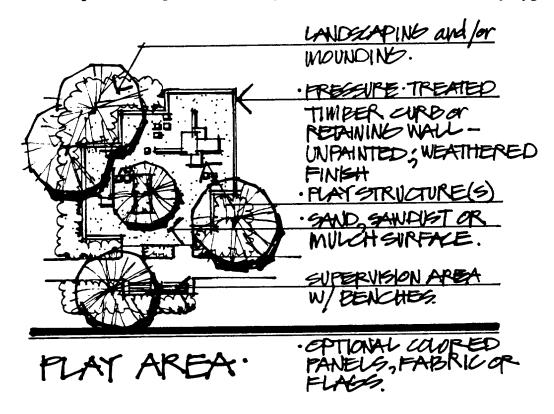
#### **PLAYGROUNDS**

Small playground areas are to be provided within 600 feet of each housing unit. They should be easily accessible. Children are not to cross a secondary collector road at grade to reach a lot. Walks are to be paved and have low gradients. Each lot should be from 1000 to 2000 square feet in size and serve from 50 to 100 families.

All play grounds should be located within view of several nearby residences, be partially shaded, have an enclosed play area secured from pets, and provide seating nearby for parents to supervise play. A soft play surface such as sand, pea gravel, sawdust or wood chips is to be used and contained within the play area.

Play equipment is to be of dimensional treated timber of traditional design such as swings, seesaws and slides, and of designs for child skills development such as balance beams, climbers, playhouses and slidepoles. A water fountain is to be available at each playground facility.

Larger playgrounds and recreation fields are to be located in single housing or between major housing areas and may be associated with school playgrounds.



**5.19.1** ADM, CF, MS, OS

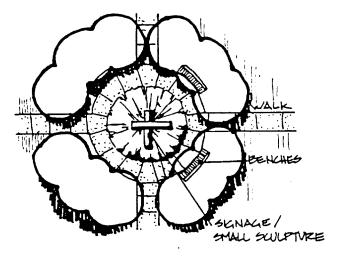
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## **MONUMENTS AND PLAQUES**

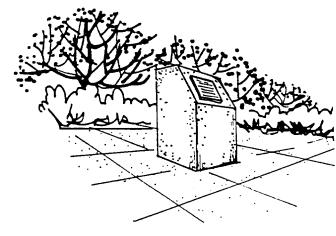
Monuments can either be sculptural works of art, or displays of technical or military hardware. They are to be displayed at points of entry or high visibility focal points. Interpretive information is to be displayed on standard exhibit/information signs (see 6.14.1) and dedication or memorial information is to be presented on bronze or brass plaques that are mounted on the base of the actual monument, in the pavement in front of the monument, or on an appropriately sized stone stand placed near the monument.

Monuments are to be sited in plaza areas or at focal points along drives and walks. Hardware displays and other monuments generally should be grouped into central plazas or courtyards except when they mark the entry to significant buildings, mark historic sites, or are at a major focal point.

Monument areas are to display hardware in natural field situations if viewed from vehicles and are to be on minimum concrete pads for weed control and maintenance. They are to be paved on all sides if viewed by pedestrians, with an appropriate material such as brick, stone sets or pavers to match materials in adjacent buildings.







TYPICAL PLAQUE BASE

5.20.1 ADM, CF, MS, HSG, OS, IND

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### **FLAGPOLES**

Flagpoles are to be used at Administration, Postal, Headquarters, School, Library, and other major community facilities buildings. They shall be of fixed metal construction and shall be painted or baked enamel white. A brass finial is optional.

Flagpoles are to be located in prominent locations near the front or principal entries to each building, preferably in a paved or plaza area. All such poles shall have a paved access path and base station for use by facility personnel or color guard units in raising and lowering ceremonies.

All flagpole installations not located in a paved area shall be heavily landscaped to provide a proper base. The approach walk to each flagpole shall also be landscaped.

Flagpoles at major Post ceremonial areas should be grouped to create a visual point of focus.

The use of sleeved or tipping poles for ease of removal or maintenance purposes is permitted.

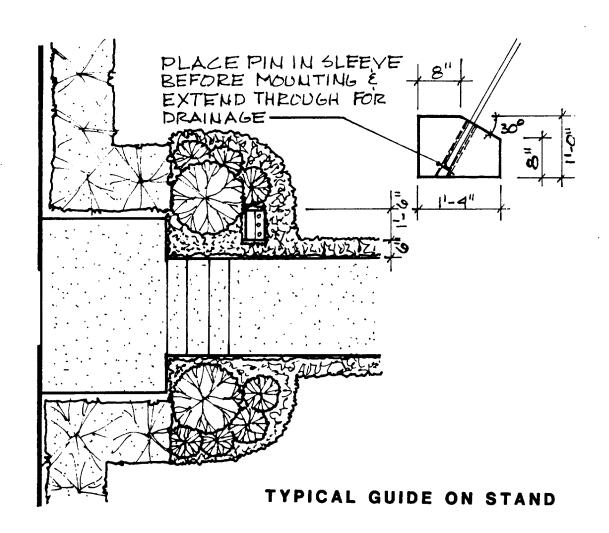
5.21.1 ADM, CF, MS, IND

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### **GUIDE ON STAND**

Guide on stands shall consist of a rough textured cream colored concrete with 1-1/2" i.d. galvanized pipe imbedded flush with the top surface. Existing concrete stands shall be painted a similar color.

Stands are to be located to the right of walks entering barracks/H.Q. buildings, on-grade at the foot of any stoop or stair leading into that building. Each stand shall have a minimum of 3 sleeves, and the guide on shall project forward from the building at a sixty degree angle.



# **DESIGN ELEMENTS MATRIX**

6. DISCIPLINE LAND USE ZONE Signage S S S L E SE CE Ž ひ≥の General Information 2. Typeface/Symbols 2 2 3. Entry Sign Headquarters/Area 4 5. Prohibitory Warning Exterior Identification 6. Centralized Facilites Changeable Message Board 7. 8. 9. Facility Entrance 10. Building Numbers 11. Recreation Facility 12. Bus Route 13. Parking/Curb Markings 1 14. Exhibit/Information 15. Pedestrian Information 1 16. Street Signs 17. 2 Temporary Signs

ADM, CF, MS, HSG, OS, IND

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#### **GENERAL INFORMATION**

SHEET 1/5

The following series of signs and specifications has been developed specifically for this installation. It is made up of selected signs and specifications taken from TM5-807-10, Signage, H.Q.D.A. December 1983, and from the recently developed TRADOC Regulation No. 420-14, Facilities Engineering, Exterior Sign Standards. Several of the signs shown in the following system have been designed for this Post, are not shown in either of the sources listed, and are unique to this installation. Several other signs in this system are to replace signs shown in either or in both sources, such as the sign for naming streets.

The system of signs shown in this design guide shall take precedence over all other sources, technical manuals or regulations. This system is however, restricted to the typical basic signs normally needed on Post and there may be a need for a sign type or size that is not shown in this guide. When such a case occurs, or when the design, construction, or placement information presented herein is not sufficient, additional information is to be taken first, from TRADOC Regulation No. 420-14 and second from TM5-807-10.

#### COLOR AND MATERIALS

All colors to be used are taken from standards developed by the Federal Highway Administration, and include the equivalent Federal Standard 595a number as well as the Pantone Matching System number. All signs shall be standard white vinyl die-cut letters on standard brown baked enamel aluminum sheeting mounted on standard brown, baked enamel, aluminum posts, unless otherwise noted. Alkyd, acrylic, epoxy or urethane enamels may be used. Reflective or vinyl sheeting and reflective graphics on reflective sheeting may be used when approved by the D.E.H. Steel, polycarbonate or exterior plywood sign panels and steel or wood sign posts may be used when approved by the D.E.H..

#### ILLUMINATION

All signs may be illuminated with non glare light sources that are not apparent in daylight hours such as indirect or below grade weather proof lights. Light shall be restricted to the sign panel only and shall be evenly distributed.

6.1.1 ADM, CF, MS, HSG, OS, IND

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#### GENERAL INFORMATION

#### SHEET 2/5

MASTER PLAN. In order to assure that all installation signage communicates clearly in an efficient and systematic way, it is strongly recommended that an Installation or Small Area sign master plan be prepared. This plan should show the location and content of every proposed exterior identification, guide, mandatory/prohibitory, and informational sign on the Installation. The plan consists of two parts, the sign location plan and the sign schedule.

- A. Sign Location Plan. The sign location plan should be prepared using a current site plan of the Installation showing all structures and other major features. To prepare a sign location plan, determine the message content, sign type, and preliminary location of each required sign. Field verify the preliminary locations, and if necessary modify the locations to accommodate existing conditions. Assign and record a sequential number for each sign on the sign location plan.
- B. <u>Sign Schedule</u>. After preparation of the sign location plan, a sign schedule should be prepared indicating all signs required or proposed using the assigned location numbers.

The system is comprised of a logical progression of sign types which guide travel to activities or facilities through orientation to major routes within the Installation and identification of each destination. The basic sequence consists of:

- Identification of the Installation.
- Notification of security enforced on the Installation.
- Identification of the major units stationed at the Installation.
- Orientation to the site.
- Direction to destinations via street names and addresses.
- Identification of destinations.

This progression of signs is supplemented as required with informational, motivational, and mandatory/prohibitory signage. Consistent and widely understood nomenclature must be used on all signs to avoid confusion. Colors to be used are to be standard brown (30099) for sign boards with white (27875) die-cut reflective letters except where otherwise noted.

EMBLEMS Standard colors for Army signage are listed in tables 2-1 and 2-2. Colors for military emblems must be in accordance with The Institute of Heraldry, U.S. Army, HQDA (DAAG-HDZ-A), Cameron Station, 5010 Duke Street, Alexandria, Virginia 22314, whose specifications utilize colors form the Standard color card of America, The Color Association of the United States, Inc. Branch colors are listed in table 2-1 in accordance with AR 670-1. Standard colors developed for the Federal Highway Administration are utilized on guide and mandatory/prohibitory signs. Colors for safety signs are in accordance with AR-385-30. Paints, inks, and reflective sheeting materials used in the production of signs must match the standard colors.

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### **GENERAL INFORMATION**

**SHEET 3/5** 

Table 2-1 Branch Colors

Branch	Color	Number
Adjutant General Corps	Dark blue/scarlet	65012/65006
Air Defense Artillery	Scarlet	65006
Armor	Yellow	65002
Army Medical Specialist Corps	Maroon/white	65017/65005
Army Nurse Corps	Maroon/white	65017/65005
Branch Immaterial	Teal blue/white	70147/65005
Cavalry	Yellow	65002
Chaplains	Black	65018
Chemical Corps	Cobalt blue/golden yellow	65011/65001
Civil Affairs, USAR	Purple/white	65009/65005
Corps of Engineers	Scarlet/white	65006/65005
Dental Corps	Maroon/white	65017/65005
Field Artillery	Scarlet	65006
Finance Corps	Silver gray/golden yellow	65008/65001
General Staff	No color assigned	
Infantry	Light blue	65014
Inspector General	Dark blue/light blue	65012/65014
Judge Advocate General	Dark blue/white	65012/65005
Medical Corps	Maroon/white	65017/65005
Medical Service Corps	Maroon/white	65017/65005
Military Intelligence	Oriental blue/silver gray	70209/65008
Military Police Corps	Green/yellow	65007/65002
National Guard Bureau	Dark blue	65012
Ordnance Corps	Crimson/yellow	65013/65002
Quartermaster Corps	Buff	65015
Signal Corps	Orange/white	65004/65005
Staff Specialist, USAR	Grœn	65007
Sgt. Maj. of the US Army	No color assigned	
Transportation Corps	Brick red/golden yellow	65020/65001
Veterinary Corps	Maroon/white	65017/65005
Warrant Officers	Brown	65016

6.1.1

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#### GENERAL INFORMATION

SHEET 4/5

Table 2-2 Standard Colors

#### Standard Brown

Reflective Sheeting:

Federal Highway Administration, PR Color #5, Highway Brown

ISCC-NBS, Color Designation 56 Strong Brown, Federal Standard 595a, Color #30099 (luster less), National Park Service Brown

PMS 469

#### Standard White

Reflective Sheeting:

Federal Highway Administration, White or Silver White

Federal Standard 595a, Color #17875 (gloss), Color #27875 (semi gloss) Ink:

PMS White

#### Standard Red

Reflective sheeting:

Federal Highway Administration, PR Color #

Paint:

Federal Standard 595a, Color#11105 (gloss), Color #21105 (semi gloss) Ink:

PMS 187

ADM, CF, MS, HSG, OS, IND

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#### **GENERAL INFORMATION**

SHEET 5/5

Standard Blue

Reflective Sheeting:

Federal Highway Administration, PR Color #3, Highway Blue

Federal Standard 595a, Color #15090 (Gloss)

Ink:

PMS 294

Standard Black

Non-reflective Sheeting

Black

Paint:

Federal Standard 595a, Color #17038 (gloss), Color #27038 (semi-gloss) Ink:

PMS Process Black



Standard Green

Reflective sheeting:

Federal Highway Administration, PR Color #4, Highway Green

Federal Standard 595a, Color #14109 (gloss), Color #24108 (semi-gloss) Ink:

PMS 342

6.2.7 ADM, CF, MS, HSG, OS, IND

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#### TYPE FACE/SYMBOLS

SHEET 1/6

#### **TYPOGRAPHY**

Two typefaces are used in the signage system: helvetica medium and helvetica regular (with the exception of traffic control signs which follow guidelines in Standard Alphabets for Highway Signs and Pavement Markings published by the Federal Highway Administration). Since typefaces are not completely standardized in the printing and signage industries, any typeface being considered must be visually matched with examples shown:

A. <u>Helvetica medium</u>. Helvetica medium, is the primary system typeface and is used for major information on all signs.

# ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 !-#\$%"&"(),.?':/

B. <u>Helvetica Regular</u>. Helvetica regular, is used for secondary information on signs and for translations of foreign languages using roman characters. Helvetica regular is never used in a situation requiring arrows.

**ABCDEFGHIJKLMNOPQRSTUVWXYZ** 

abcdefghijklmnopqrstuvwxyz

1234567890 !-#\$%"&"(),.?':/

ADM, CF, MS, HSG, OS, IND

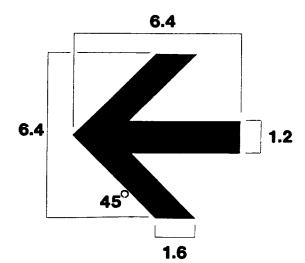
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#### TYPEFACE/SYMBOLS

**SHEET 2/6** 

- C. <u>Letter Spacing</u>. Applications of letters should be proportionately spaced to maintain visually equal spacing and alignment. Mechanically equal spacing will not be used.
  - 1. <u>Letter Spacing Standards</u>. Letter spacing standards should be followed for both helvetica medium and helvetica regular type-faces. These standards are based on a unit system. Each unit is equivalent to 1/50th of the capital letter height.
  - Tile system. Adhesive-backed vinyl die-cut letters supplied on proportionately sized paperboard tiles are an alternative letter spacing method. These tiles are notched to assure vertical alignment. The tiles are placed next to each other, lining up the alignment notches with the grid lines drawn on the sign face. Tile systems allow installations personnel to prepare professional quality signs with minimal training. Since letters are available individually, any message can be prepared as required, provided that an inventory of character tiles is maintained.
  - 3. Prespaced system. Adhesive-backed vinyl die-cut letters, prespaced and aligned on a transparent carrier sheet, are another alternative letter spacing method. This allows installation personnel to prepare professional quality signs quickly with minimal training. No inventory is required; however, lead time is necessary for manufacturers to prepare ordered messages.
- D. Standard arrows. All guide and informational signage intended for pedestrian use, either exterior or interior, must use the arrow shown.

CAPITAL LETTER HEIGHT = 5.0



ADM, CF, MS, HSG, OS, IND

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#### TYPEFACE/SYMBOLS

**SHEET 3/6** 

#### E. Layout guidelines.

- 1. Good judgement is the key to deciding where the lines should break in a sign message. Single ideas or names should appear on the same line, as follows:
  - a. Headquarters Fort McPherson
  - b. not,Headquarters FortMcPherson
- 2. Names should be spelled out in full whenever possible, unless otherwise specified in the authorized unit name, as follows:
  - a. 4th Infantry Division
  - b. 4th Battalion 61st ADA

If abbreviations are required, they must be in accordance with AR 310-50.

- 3. Numbers should be used for the titles of military units except corps, which are designated by Roman numerals, and armies, which are spelled out in accordance with AR 340-15, as follows:
  - a. Eighth US Army
  - b. 56th Artillery Brigade
- 4. Line breaks should be balanced, as follows:
  - Material Development and Readiness Command
  - b. Engineering Plans/ Real Property
  - c. United States
    Post Office
  - d. Authorized
  - e. Training and Doctrine Command

ADM, CF, MS, HSG, OS, IND

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#### TYPEFACE/SYMBOLS

SHEET 4/6

Traffic Control Devices, the symbols described here are for use on Army exterior and interior signs. The symbol background border must be square with rounded edges and the line weight of the border must be consistent for all symbols.

- A. <u>Service symbols</u>. The service symbols shown were developed for the Department of Transportation (DOT) for use in transportation-related facilities. The pictograph should be black against a white background, with the following exceptions:
  - 1. Accessibility for the handicapped. When used for traffic control, this symbol must follow standards in the Manual on Uniform Traffic Control Devices. Accessibility for the handicapped symbols should be used in accordance with DOD Manual 4270.lm Chapter 18. Dec. 15. 1983 with additional identification and directional signage as required. The symbol is composed of two elements: a white wheelchair figure (which should always face right) on a square background colored international (safety) blue (Federal Standard 595a, color #15180). In areas serving the visually handicapped, the symbol, letters, and numbers should be raised or indented 1/16 inch with letters or numbers 2 to 3 inches in height.
  - 2. First Aid. Red cross on a white background.



ADM, CF, MS, HSG, OS, IN

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#### TYPEFACE/SYMBOLS

SHEET 5/6

В. Concession symbols. The symbols for concession services are shown. The pictograph should be black on a white background.









- Mandatory/prohibitory symbols. Symbols for mandatory/prohibitory C. signage, were developed to regulate safety instruction and pedestrian traffic. The symbols are not intended for traffic control, with the exception of "Parking" and "No Parking". The pictograph color standards are as follows:
  - l. Fire extinguisher. Red pictograph on a white background.
  - 2. No entry. Red pictograph on a white background.
  - Smoking, Black pictograph on a white background.
  - No smoking. black pictograph with red circle and slash overlay on a white background.
  - Parking. Green "P" on a white background. 5.
  - Reserved parking. Black "P" on a white background. 6.
  - No parking. Back "P" with red circle and slash on a white background.
  - 8. No dogs. Black pictograph with red circle and slash overlay on a white background.













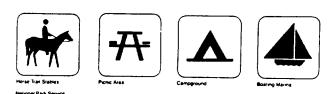
ADM, CF, MS, HSG, OS, IND

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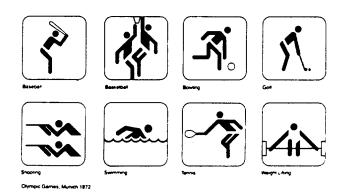
#### TYPEFACE/SYMBOLS

SHEET 6/6

D. Sports and recreation symbols. These symbols were developed for the National Park Service. The pictograph should be black on a white background.



E. Olympic Games symbols. Sports symbols developed for the 1972 Olympic Games should be used for those activities not covered by the national Park Service symbols. The pictograph should be black on a white background.



#### MILITARY EMBLEMS

- A. Department of the Army Plaque. The plaque is displayed on base identification signs to emphasize the heritage and professionalism of the United States Army. The design of the plaque must be in accordance with AR 840-1, and it must appear in full color.
- B. <u>Unit Emblems</u>. Military units may use their branch insignia, shoulder sleeve insignia, coats of arms, or distinctive unit insignia on their headquarters signs. In addition; insignias, coat of arms, and unit mottos may be used on motivational signs to symbolize the honor and prestige of a military unit. Military emblems must appear in full color.

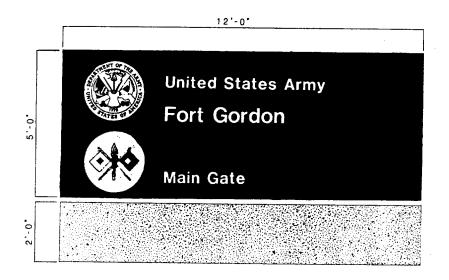
6.3.1 ADM, OS

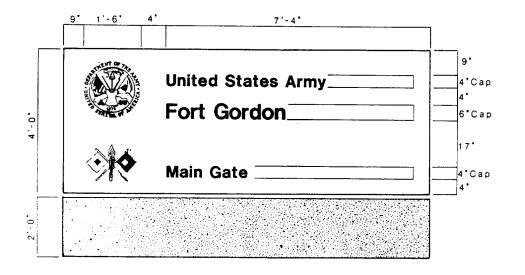
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#### **ENTRY SIGN**

SHEET 1/2

To be used at all major points of entry to Post, in Open Space Zone only.





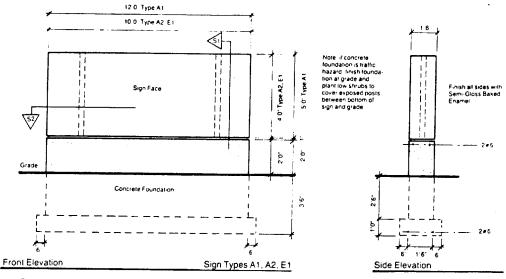
6.3.1 ADM, os

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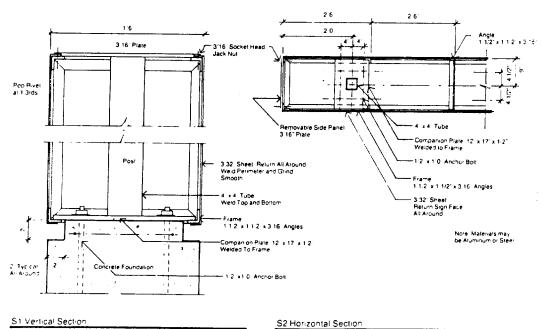
### **ENTRY SIGN**

#### SHEET 2/2

Sign base to be Fed. Std. 595-A #33717, cream color is to be integrated into mix, and with a sandblast finish.



Note: Refer to sign type descriptions for color specifications

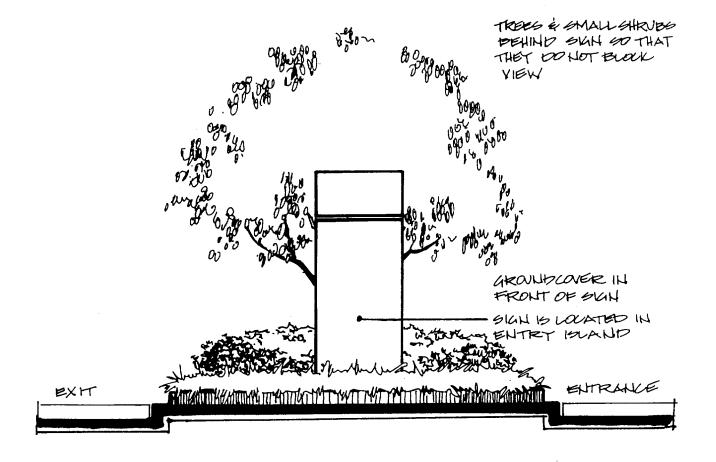


6.3.2 ADM, CF, MS, IND

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### **ENTRY SIGN**

In those areas where a group of buildings are located in a complex, this sign is to be used at the major entry to identify the buildings within the complex. (Type C-l sign)



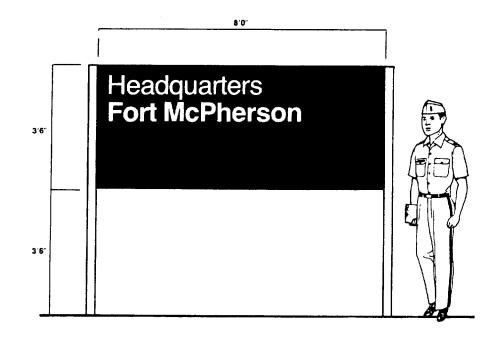
6.4.1 ADM, CF, MS, HSG, OS, IND

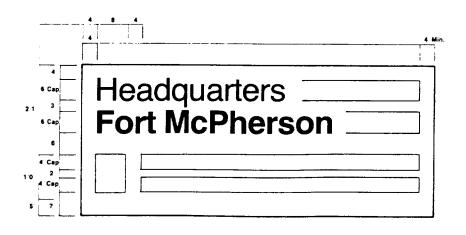
AR LA	CE	ME	SE	EE
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### HEADQUARTERS/AREA

SHEET 1/3

To be used at: Installation Headquarters, (command, division and brigade) headquarters, secondary Post entrances, and at points of graphic display. This sign will be at the entry to all housing areas, small areas and remote facilities attached to the Post.



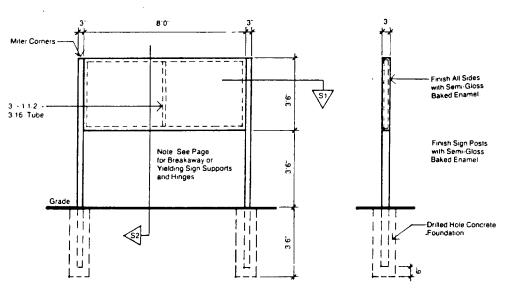


ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

### **HEADQUARTERS/AREA**

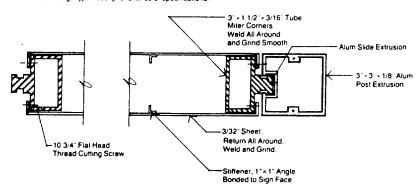
SHEET 2/3



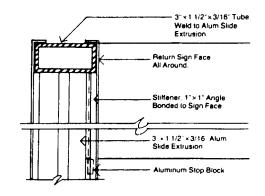
Front Elevation Sign Type B1

Note. Refer to sign type descriptions for color specifications.

Side Elevation



S1 Horizontal Section



adquarters
Training and Doctrine

S2 Vertical Section

AR	LA	CE	ME	SE	EE
----	----	----	----	----	----

#### HEADQUARTERS/AREA

SHEET 3/3

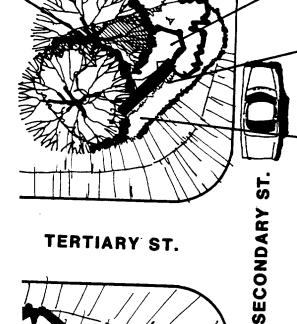
THIS WOULD WORK FOR SMALL AREAS SUCH AS A HOUSING ENTRANCE.

-DECIDUOUS TREES ADD SEASONAL YARIETT & INTEREST

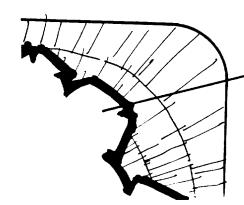


SIGN SHOUD BE POSITIONED FOR HIGHEST VISIBILITY FROM SECONDARY STREET.

-GROWPLOYER IN FRONT TO TIE SIGN TO THE GROUND BUT NOT INTERFERE WITH VISIBILITY.



TERTIARY ST.



TREE PLANTING ON THIS SIDE BALANCES ENTRY ALSO HELPS DEFINE THE ENTRANCE.

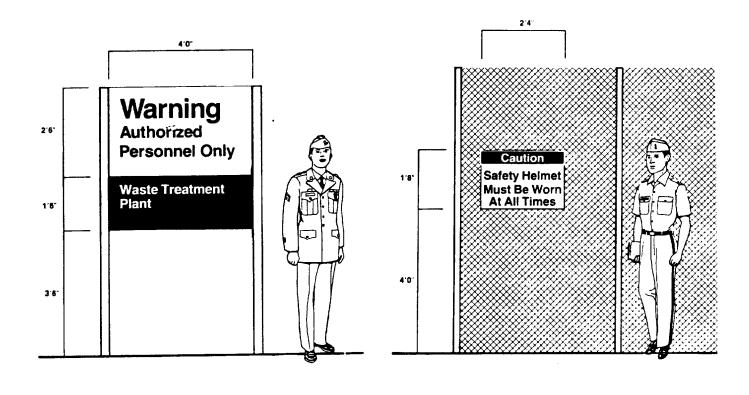
6.5.1 ADM, CF, MS, HSG, OS, IND

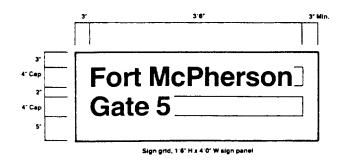
AR	LA	CE	ME	SE	EE
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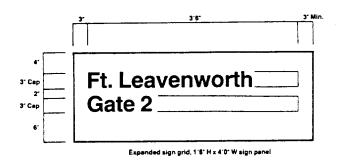
#### PROHIBITORY WARNING

**SHEET 1/3** 

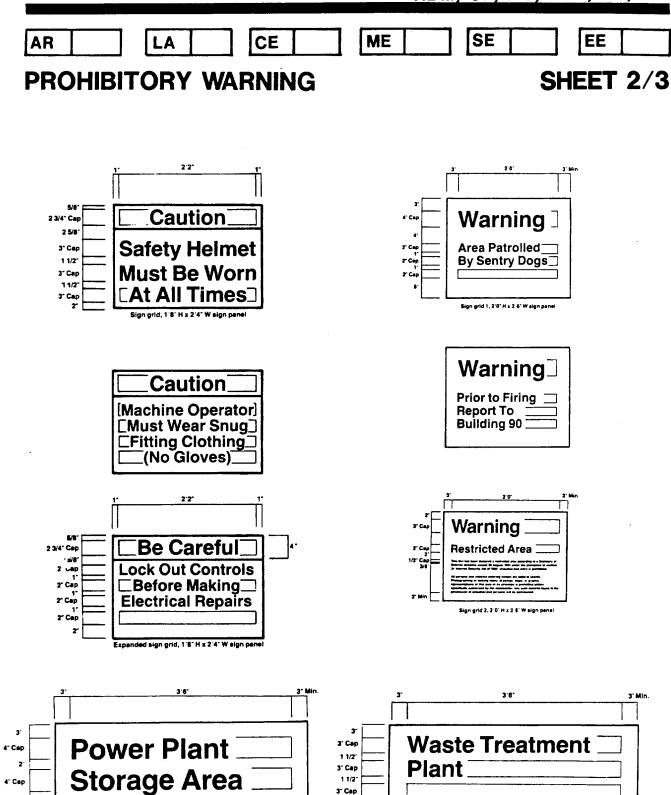
To be used at: Secondary Post entrances, restricted areas, displays for unit morale, points are areas of warning, or as safety reminders.







ADM, CF, MS, HSG, OS, IND



3" Cap

Sign grid, 1'6" H x 4'0" W sign panel

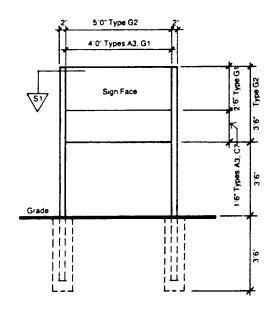
Expanded sign grid, 1'6" H x 4'0" W sign panel

6.5.1 ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

### PROHIBITORY WARNING

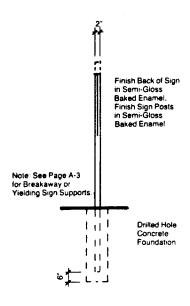
#### SHEET 3/3



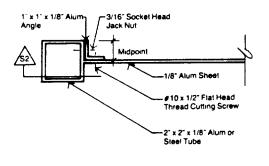
Front Elevation

Sign Types A3, C7, G1, G2

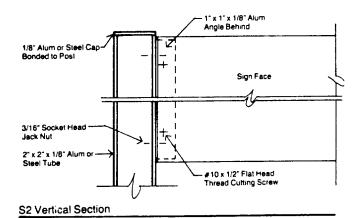
Note: Refer to sign type descriptions for color specifications.



Section

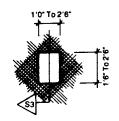


S1 Horizontal Section



1'0' To 2'5'

Wall-mounted



Fence-mounted

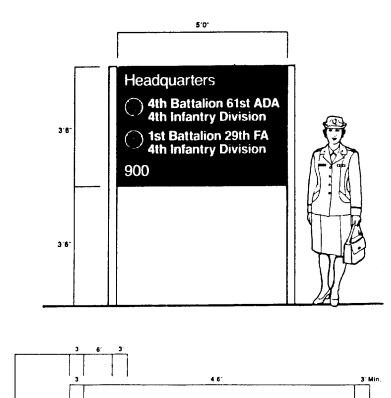
6.6.1 ADM, CF, MS, OS, IND

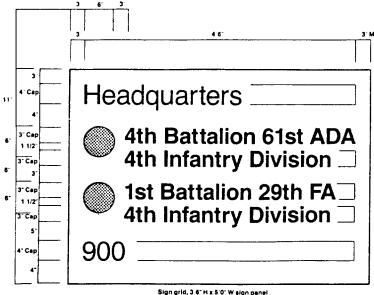
AR LA	CE	ME	SE	EE
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#### **EXTERIOR IDENTIFICATION**

SHEET 1/2

To be used at: Battalion Headquarters. (headquarters' building entrances, and points of warning) or for Post directories.



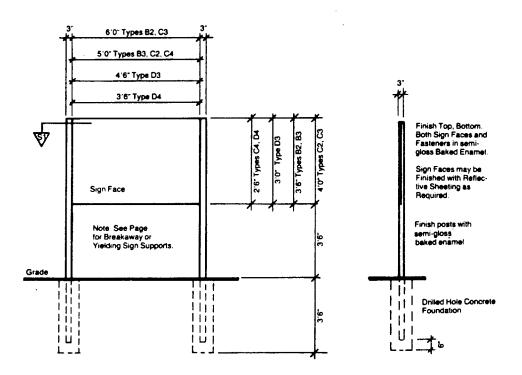


6.6.1 ADM, CF, MS, OS, IND

AR LA CE ME SE EE

#### **EXTERIOR IDENTIFICATION**

SHEET 2/2

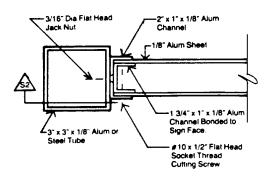


Front Elevation Sign

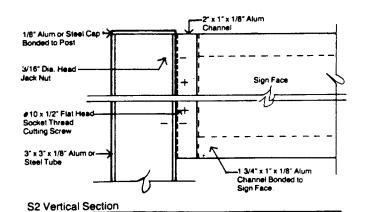
Sign Types B2, B3, C2, C3, C4, D3, D4

Section

Note: Refer to sign type descriptions for color specifications.



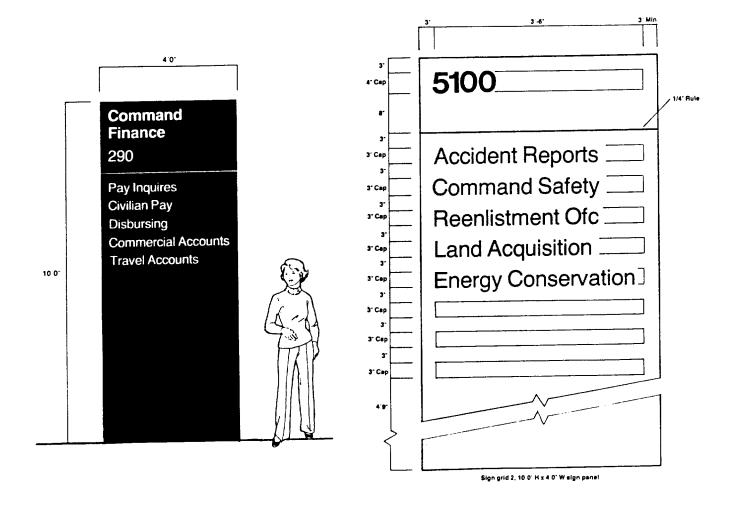
S1 Horizontal Section



6.7.1 ADM, CF, MS

AR LA CE ME SE EE CENTRALIZED FACILITIES SHEET 1/2

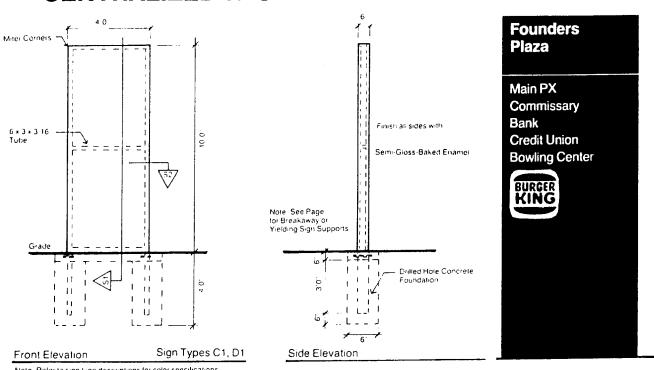
To be used at: Primary centralized military and community facilities.



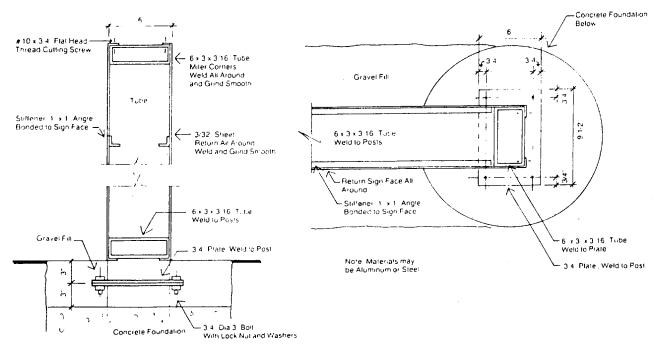


### **CENTRALIZED FACILITIES**

SHEET 2/2



Note. Refer to sign type descriptions for color specifications.



S1 Vertical Section

S2 Horizontal Section

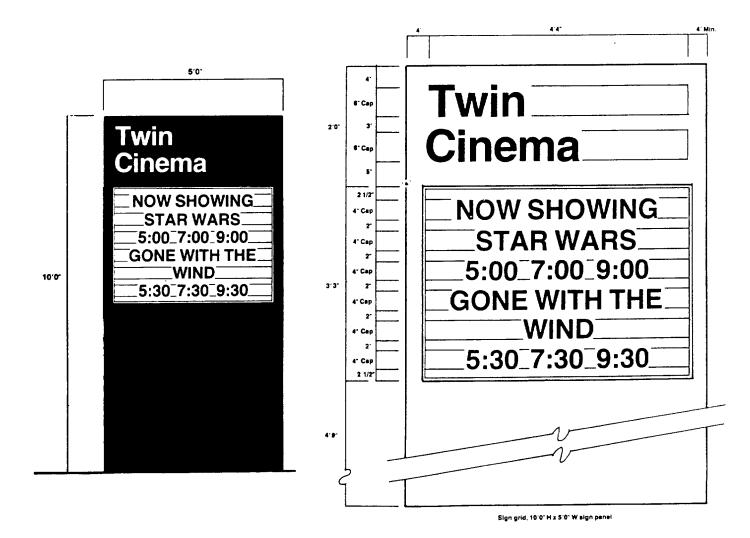
6.8.1

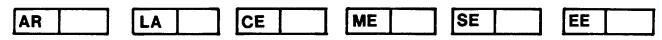
AR	LA	CE	ME	SE	EE
	<del></del>	<del></del>			

#### CHANGEABLE MESSAGE BOARD

SHEET 1/2

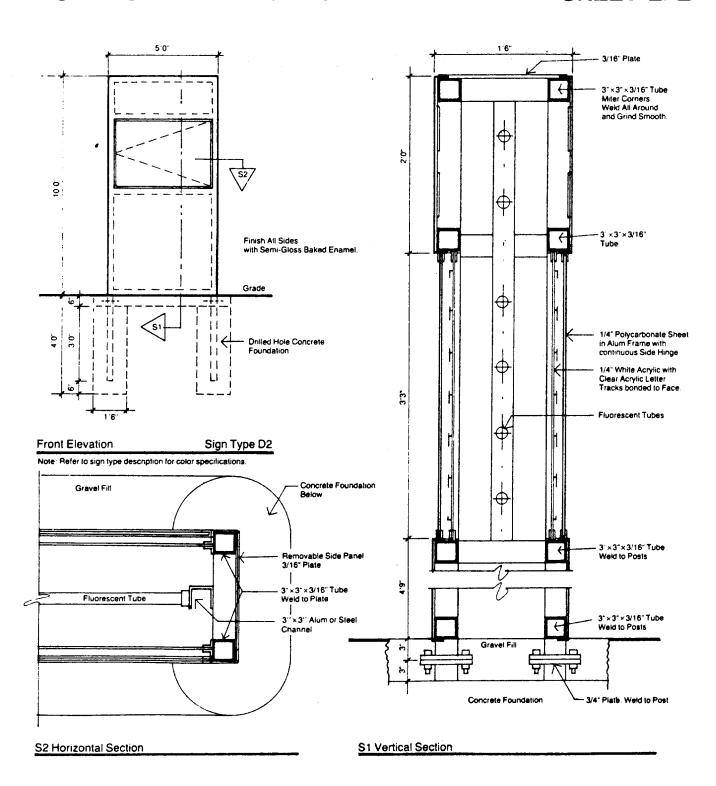
To be used at: All facilities requiring a changeable message board, such as: theatres, service clubs, chapels, etc.





### **CHANGEABLE MESSAGE BOARD**

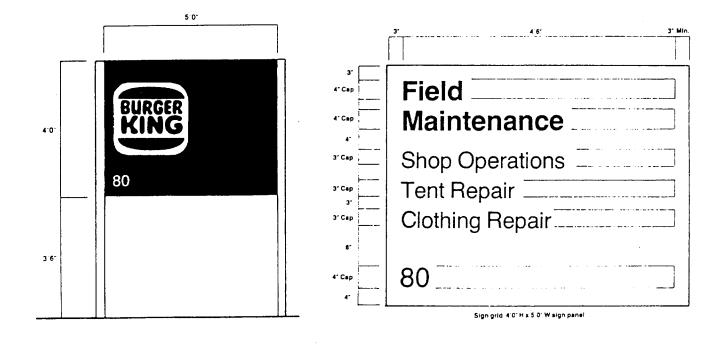
SHEET 2/2

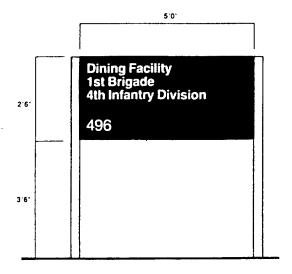


ADM, CF, MS, OS, INC

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EACH ITY ENTRANCE				QL.	IEET 1/A

To be used at: Secondary centralized military and community facilities, primary military and community facilities, areas of warning, vehicular directional information, and for standard morale signs.





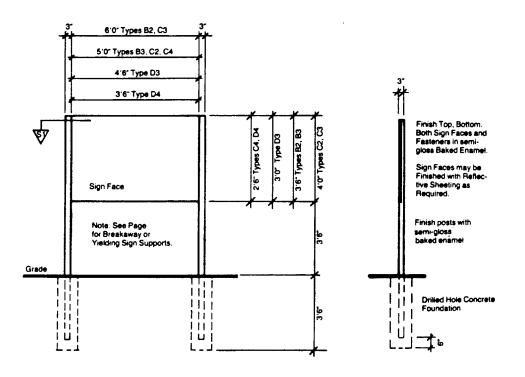
16	·
Dining Facility  1 1/2 1 Cap 1 1/2 2 Cap 1 1/2 3 Cap 4th Infantry Division	
7 4* Cap 4* Sign grid, 2*6* H x 5 0* W sign panel	

6.9.1 ADM, CF, MS, OS, IND

AR LA CE ME SE EE

**FACILITY ENTRANCE** 

SHEET 2/4

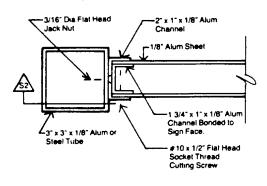


Front Elevation Sign Types B2, B3

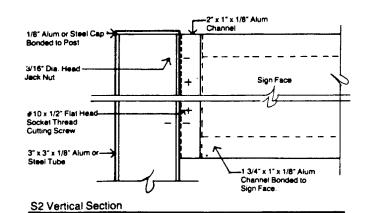
Sign Types B2, B3, C2, C3, C4, D3, D4

Section

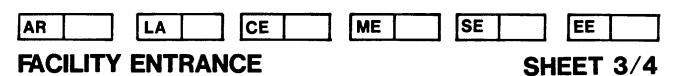
Note: Refer to sign type descriptions for color specifications.



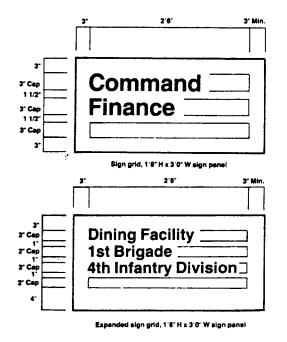
S1 Horizontal Section

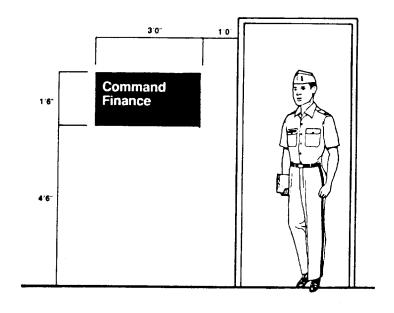


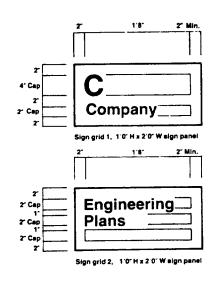
6.9.1 adm, cf, ms, os, ind

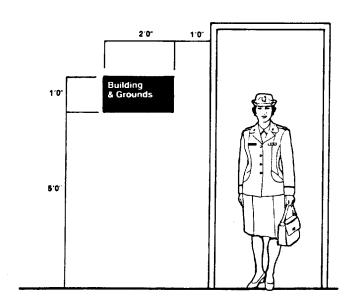


To be used at: Military and community building entrances both primary and secondary as needed, and for vehicular directional information.







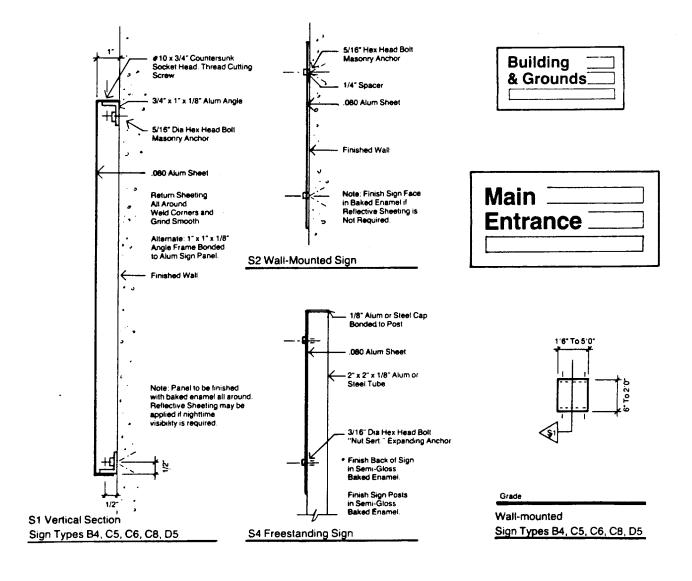


6.9.1 ADM, CF, MS, OS, IND

AR LA CE ME SE EE

#### **FACILITY ENTRANCE**

SHEET 4/4

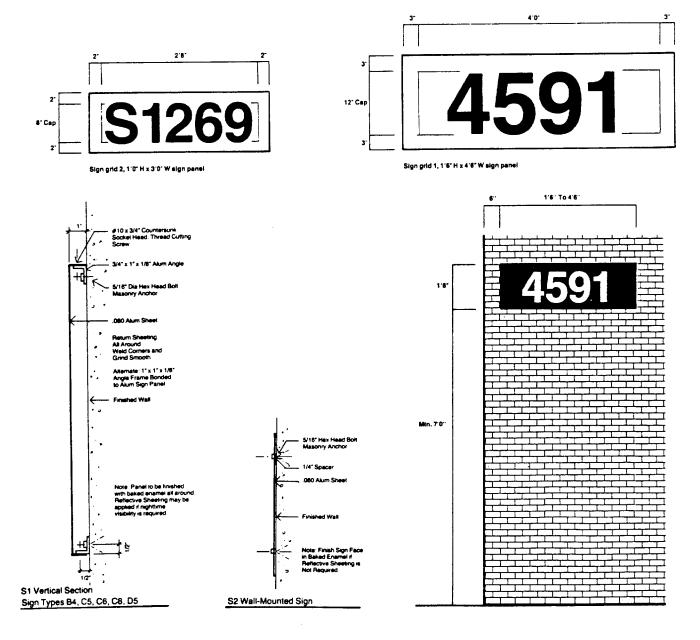


6.10.1 ADM, CF, MS, HSG, OS, IND

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#### **BUILDING NUMBERS**

To be used on all permanent and semi-permanent military and community buildings. Building numbers for temporary buildings shall be applied as painted stencils in a contrasting color to the wall surface. Stencils shall be of a size and letter size similar to the signs shown. Numbers shall be placed in prominent locations on each building. Housing numbers will be stenciled also.

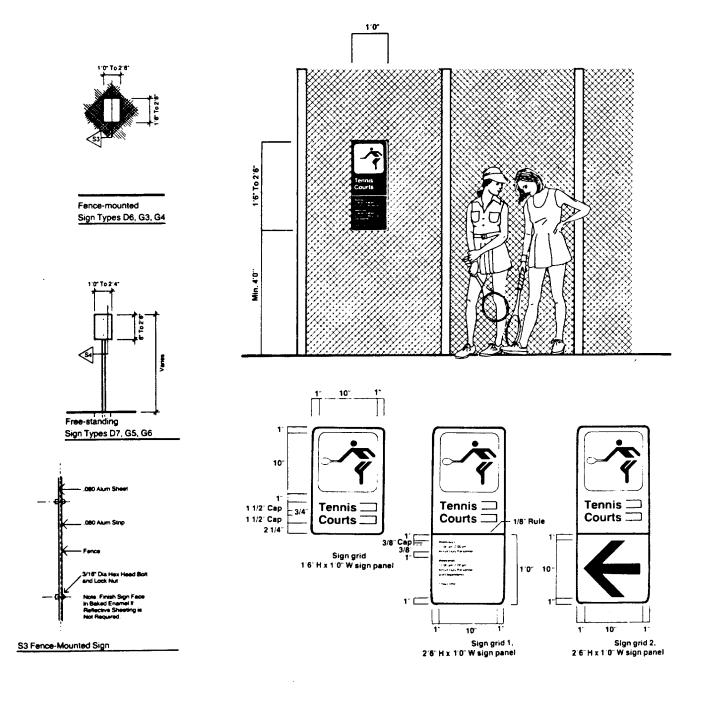


6.11.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
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### **RECREATION FACILITY**

To be used at all recreation facilities both indoor and outdoor.

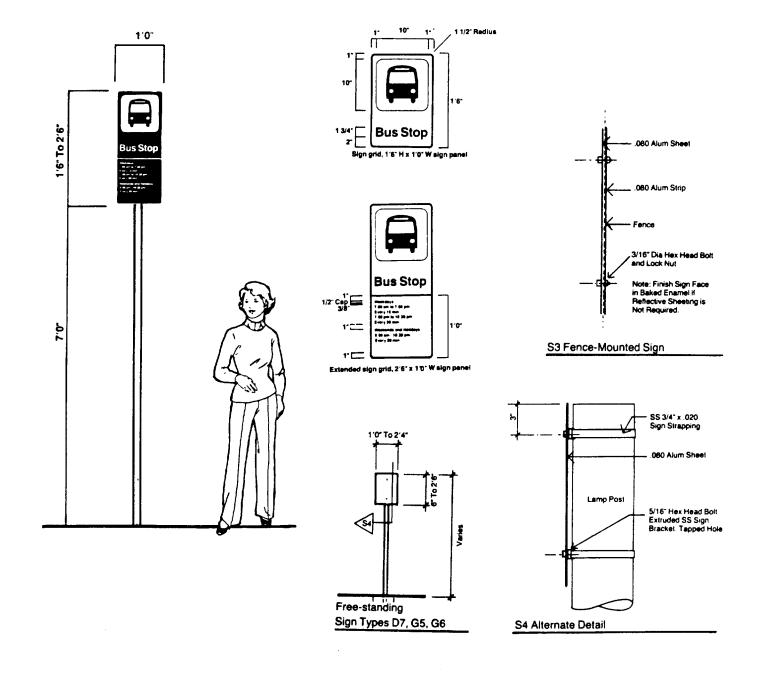


6.12.1 ADM, CF, MS, HSG, OS, IND

AR	LA	CE	ME	SE	EE
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#### **BUS ROUTE**

To be used at all bus stops for public, military and school bus systems. Sign may be mounted on free standing post or attached to light pole.

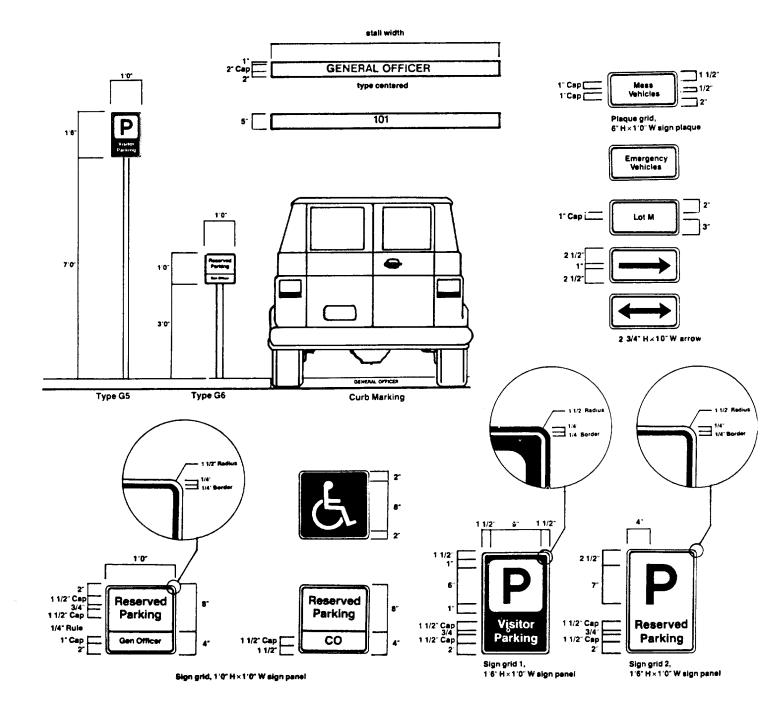


6.13.1 ADM, CF, MS, HSG, OS, IND

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### PARKING/CURB MARKINGS

To be used as needed. Curb or pavement markings are to be used as a first alternative with sign standards being used only in cases where curb or pavement markings are determined to be inadequate.



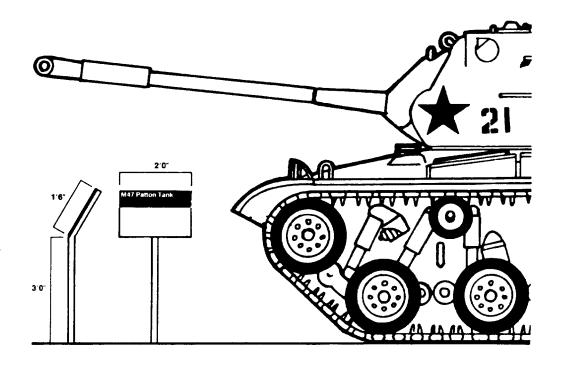
6.14.1 ADM, CF, MS, OS

AR LA CE ME SE EE

## **EXHIBIT/INFORMATION**

SHEET 1/2

To be used at all exhibit or interpretive displays.



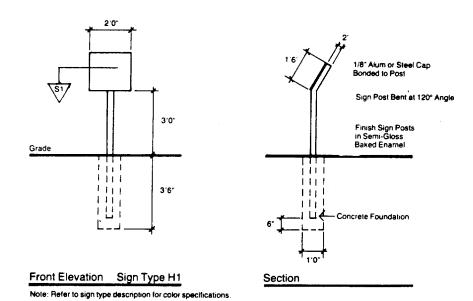


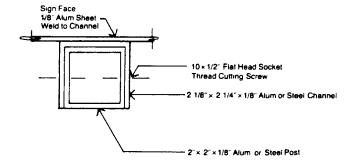
6.14.1 ADM, CF, MS, OS

AR LA CE ME SE EE

**EXHIBIT/INFORMATION** 

**SHEET 2/2** 





S1 Vertical Section

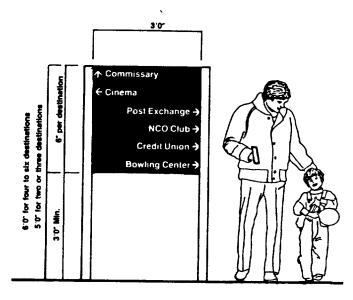
6.15.1 ADM, CF, MS, OS, IND

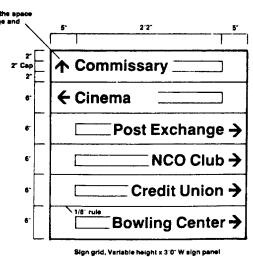
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## PEDESTRIAN INFORMATION

SHEET 1/2

To be used for pedestrian, and bicycles path directional information.



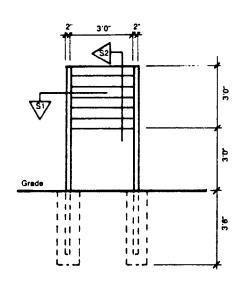


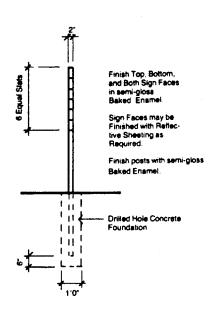
6.15.1 ADM, CF, MS, OS, IND

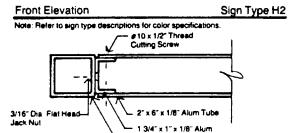
AR LA CE ME SE EE

## PEDESTRIAN INFORMATION

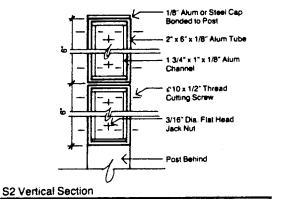
SHEET 2/2





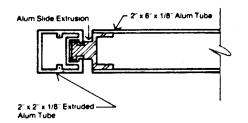


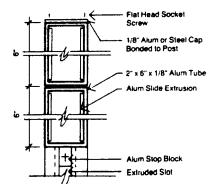
Section



S1 Horizontal Section

2" x 2" x 1/8" Alum or





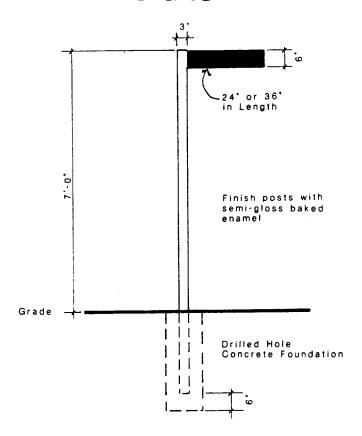
S2 Alternate Vertical Section

S1 Alternate Horizontal Section

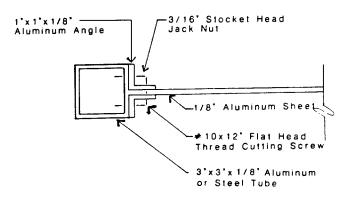
ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

## STREET SIGNS



Front Elevation

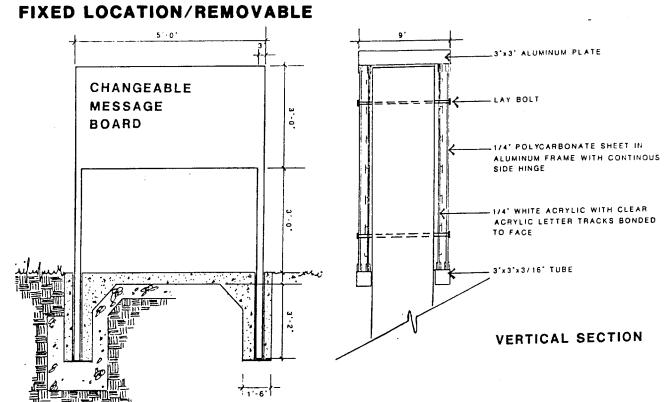


Horizontal Elevation

AR LA CE ME SE EE

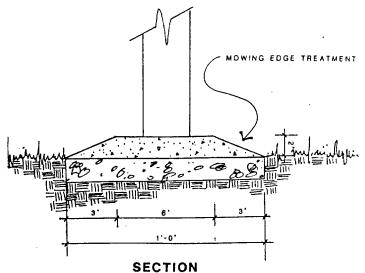
# TEMPORARY SIGNS

## SHEET 1/2



FRONT ELEVATION

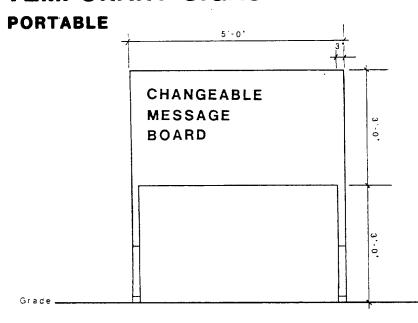
Locations for this type of temporary sign will be determined in the Sign Location Plan for the Post. The footings can then be installed and signs erected for special occasions for short periods of time.





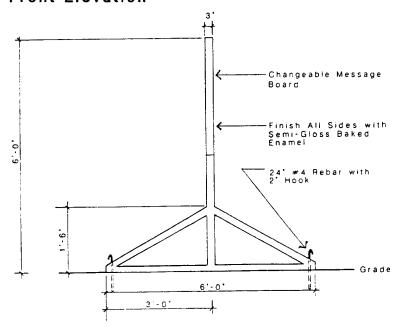
## **TEMPORARY SIGNS**

## SHEET 2/2



This temporary sign is constructed to allow free mobility in placement. The sign is to be used for special events and will only be erected in these zones for short periods of time. A concerted effort is to be made to keep these signs to a minimum; and their prompt removal after an event is mandatory.

#### Front Elevation

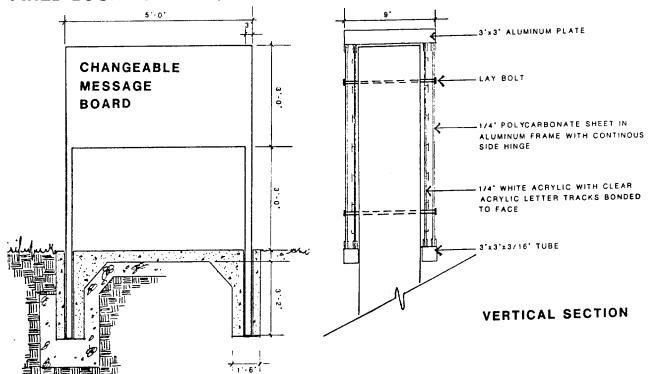


**Vertical Section** 

AR LA CE ME SE EE

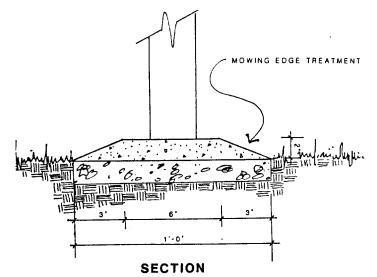
## **TEMPORARY SIGNS**

### FIXED LOCATION/REMOVABLE



FRONT ELEVATION

Locations for this type of temporary sign will be determined in the Sign Location Plan for the Post. The footings can then be installed and signs erected for special occasions for short periods of time.



## **DESIGN ELEMENTS MATRIX**

DISCIPLINE **Utilities &** LAND USE ZONE Lighting S S S General Information Light Pole Light Bollard Fixture Location & Spacing 3 Swales & Channels 2 2 Grates & Inlets 8. Retention Basins 9. Traffic Signals 2 2 Utility Structures 10. Hook ups 11. Utility Vaults

ADM, CF; MS, HSG, OS, IND

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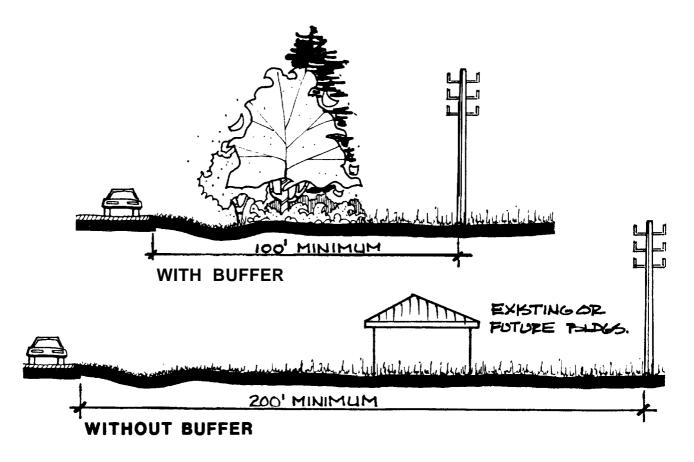
## **GENERAL INFORMATION**

### SHEET 1/4

Utility systems are essentially transportation for water, gas, power, steam, communications, and wastes. They traditionally align with the road network for several valid reasons but should not dominate the streetscape. The principal effort to reduce their impact is by placing them underground in combined systems. This leaves only the surface access, at grade equipment to deal with.

Areas such as main gates, parade grounds, memorial areas, major parkways, administration buildings and community facilities, are highly visible and in these areas utilities are to be placed underground.

If underground utilities are not possible due to economic or other reasons, the lines and poles must be routed to the back or least visible side of buildings. If underground utilities are not possible along streets and parkways, the utilities must be located at least 100 feet from the street-if there are existing trees to act as a buffer. If there are no existing trees, the lines must be a minimum of 200 feet from the street.

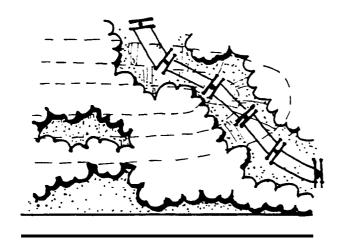


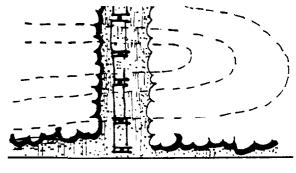
AR	LA	CE	ME	SE	EE
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**GENERAL INFORMATION** 

SHEET 2/4

UTILITIES SHOULD BE PLACED UNDERGROUND WHENEVER POSSIBLE. OVERHEAD LINES SHOULD FOLLOW THE NATURAL CONTOUR OF THE LAND AND AVIOD PLACEMENT ON RIDGES AND IN OTHER HIGH VISIBILITY AREAS. WHEN LOCATED ALONG ROADWAYS, LINES SHOULD BE AN APPROPIATE DISTANCE FROM THE PAVEMENT AND SCREENED, OR LOCATED BEHIND AN EXISTING NATURAL VEGETATIVE PUFFER. CLEARING EDGES SHOULD BE DONE ALONG NATURALLY OCCURING LINES AND SHOULD BE CURVILINEAR NOT STRAIGHT.





**THIS** 

**NOT THIS** 

 $\begin{array}{c} 7 \ . \ 1 \ . \ 1 \\ \text{ADM, CF, MS, HSG, OS, IND} \end{array}$ 

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### **GENERAL INFORMATION**

**SHEET 3/4** 

### FIRE HYDRANTS

Fire hydrants that produce 1000 G.P.M. or less are to be painted in the following manner. The body will be reflective cream, Federal Standard 595a H33717 and all nozzle caps will be dark brown, Federal Standard 595a 820095. Hydrants that produce more than 1000 G.P.M. are to have a standard reflective cream body but only the top cap is to be painted the standard dark brown.

### LIGHTING

All Light poles, lighted bollards, spots, and all other lighting are to have underground power supply and wiring whenever possible.

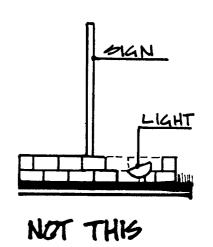
Lights should be located to prevent glare or spillover into areas that are not to be lighted. Spillover lighting can also be used in a positive manner. Building entry walks or parking areas can be lit with spillover light from front porches. Sidewalks can be lit with spillover light from street lights.

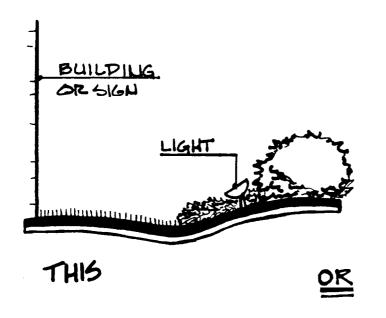
Light standards are to be spaced evenly with other furnishings grouped nearby. Bus stop and standard traffic signs may be attached to light standards using low visibility and compatible fastening systems. See detail in Section 6.12.1.

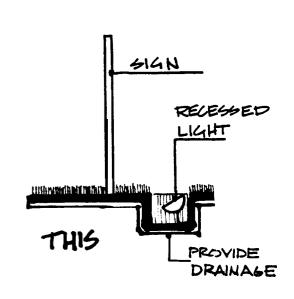
7.1.1 **ADM, CF, MS**, HSG, OS, IND



WHEN SPOT LIGHTS ARE USED TO LIGHT SIGNS OR MONUMENTS OR TO ACCENT A BUILDING, THEY ARE TO BE RECESSED IN THE GROUND OR HIDDEN IN EVERGREEN PLANT MATERIAL.



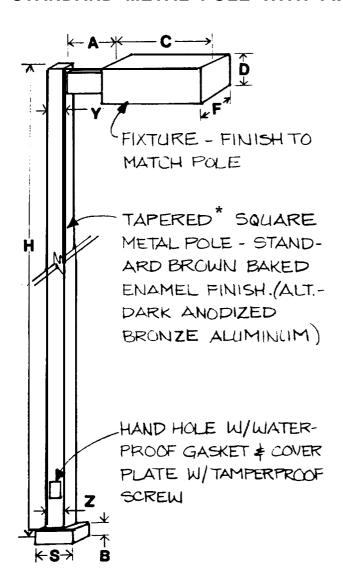




**7.2.1** ADM, CF, MS, HSG, OS, IND



### STANDARD METAL POLE WITH FIXTURE



### **DIMENSIONS**

<b>H</b> Pole Height	12'	20'	25'	40"
<b>Y</b> TOP	3"	4"	5"	6"
<b>Z</b> Bottom	5"	6"	8"	10"
<b>B</b> Plate	5/8"	3/4"	3/4"	1'
<b>S</b> Base	10"	10"	14"	17"
<b>A</b> Arm	6'	a"	8"	9"
<b>C</b> Fixture	19"	24"	28"	33"
<b>D</b> Fixture	7"	10"	10"	10"
<b>F</b> Fixture	16"	17"	19"	21"

NOTE: Dimensions will vary from manufacturer to manufacturer. A variance of no more than 5% of these dimensions is permitted.

<sup>\*</sup>Tapered pole is preferred, but, if tapered pole is unavailable, a straight pole may be used. Either all tapered or all straight poles must be used in an area. The two cannot be mixed.

**7.2.1** ADM, CF, MS, HSG, OS, IND

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## LIGHT POLE

**SHEET 2/2** 

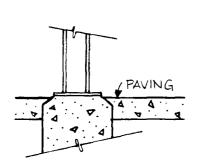
Metal Pole - Aluminum is preferred over painted steel, because it requires less maintenance; but it is more expensive. Either one may be used, but only one kind is to be used in any area.

The metal pole is to be the standard used on Post, except under the following conditions where wooden poles are acceptable.

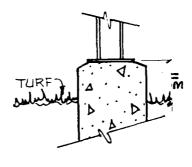
Wooden Pole - This pole is to be a treated peeler pole with a dark brown transparent stain. It is to be used for utility lighting in low visibility areas in industrial and mission support areas. Ball field and sport lights may also be mounted on wooden poles. The required height of the pole is determined by the mounting height of the fixture.

Poles are to be anchored as per manufacturer's specifications. Wooden pole footings are to be set on a bed of gravel for drainage. Metal pole base heights are shown below. The footing for a metal pole is to be natural unpainted concrete. Motorists invariably hit unprotected poles, therefore a two foot high concrete base is to be used for poles in parking areas that are not protected from cars by curbs or islands.

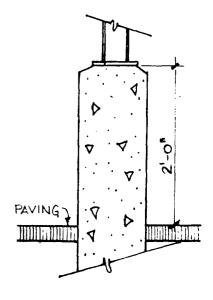
# BASE DETAIL FOR POLES LOCATED IN:



SIDEWALKS & PLAZAS



TURF & LANDSCAPING



**PARKING LOTS** 

7.3.1 ADM, CF, MS, HSG, OS, IND

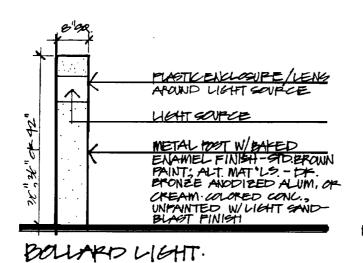
	AR	LA	CE	ME	SE	EE	
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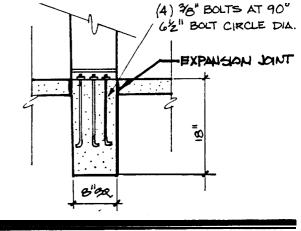
## LIGHT BOLLARD

Lighted bollards will be used on special pedestrian walkway areas such as at stairs, ramps, or along secondary pathways that do not receive sufficient light from another source. Plazas may require additional lighting that may best be supplied by the lighted bollard. The lighted bollard is characterized by low wattage requirements. Due to the lighted bollards location in pedestrian areas it is often subject to vandalism, special vandal-resistant tamper-proof screws and good quality lenses will be used. 'Lexan' lenses are recommended.

Bollard color will be uniform in any one area and will coordinate with other furnishings in the area. Bollard height is determined by the area to be lighted. For instance, if a walkway is large, the bollard should be taller. If the walkway is narrow, the bollard should be shorter. Of course, the bollard should also be in scale with its surrounding elements.

The bollard should be bolted to a concrete base following manufacturer's recommendations.





TYP MOUNTING DETAIL

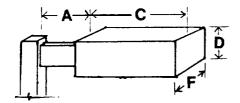
ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

FIXTURE SHEET 1/3

### **CUT OFF FIXTURE**

The standard cut off fixture is to be used on poles of varying heights and may be mounted directly on buildings. The size of the fixture is determined by the mounting height, see chart below.



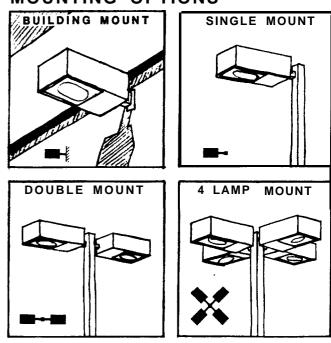
FINISH IS TO BE STANDARD BROWN BAKED ENAMEL. ALT.-DARK ANODIZED BRONZE ALUMINUM.

### **DIMENSIONS**

<b>H</b> Pole Height	12'	20'	2'5'	40'
<b>A</b> Arm	6"	8"	6"	9"
<b>C</b> Fixture	19"	24"	26"	33"
<b>D</b> Fixture	7"	10"	10"	10"
<b>F</b> Fixture	16"	17"	19"	21″

NOTE: Dimensions will vary from manufacturer to manufacturer. A variance of no more than 5% of these dimensions is permitted.

### **MOUNTING OPTIONS**



ADM, CF, MS, HSG, OS, IND

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FIXTURE

**SHEET 2/3** 

### LAMP TYPES

There are a variety of light sources available for exterior lighting. The following is a simple explanation of each type dealing with efficiency, maintenance and effect. This information is general only; for specific areas see Location and Spacing charts in Section 7.5.1 through 7.5.4.

HIGH PRESSURE SODIUM - This light source is very efficient, relatively long lived, with a high lighting level. The light color is in the pink to orange range which is not particularly flattering to plants or people.

MERCURY VAPOR - The mercury vapor lamp is longer lived than any other source mentioned here. However, it is not as efficient as the high pressure sodium and it produces lower lighting levels. The color of the light produced is bluish to greenish and not complimentary to people or plants although it is not as offensive as high pressure sodium light. Color corrected mercury vapor is even less offensive and should be used instead of mercury vapor.

<u>METAL HALIDE</u> - Metal halide is between mercury vapor and high pressure sodium in both efficiency and longevity. It has good color rendition and is not psychologically offensive to people.

<u>INCANDESCEN</u>T - This lamp type has the most pleasing color of all light sources. However, low efficiency and short life span limit its use except in special areas where its warm color strengthening characteristics are required.

### **ILLUMINATION LEVELS**

Illumination levels are determined by the amount of nighttime activity that will take place in an area. Primary streets should be lit brighter than secondary streets. Housing areas should be lit at the lowest level allowed for safety. Standards for foot-candle levels should be followed for the different use areas with allowances for special conditions.

**7.4.1** ADM, CF, MS, HSG, OS, IND

AR LA CE ME SE EE

**FIXTURE** 

SHEET 3/3

### **SPOT**

Spotlights should be **used** wherever accent lighting is desired. Signs, monuments, and certain important buildings may be lit for nighttime viewing. Spots that swivel are versatile and can be re-aimed if the position or size of the display or sign is changed. However, spots should never be used where they will distract nearby motorists.

### FLUSH WALL MOUNT FIXTURE

There are many types of wall mount fixtures. Some are very susceptible to vandalism. If these fixtures are used they should be high quality and vandal proof. The most likely use for these fixtures on Post are along ramps or stairs that are difficult to light from above. In some instances these lights are safer and create a more pleasing effect than would pole mounted fixtures or bollards.

7.5.1 adm, cf, ms

AR	LA	CE	ME	SE	EE
LOCATI	ON & SE	PACING		SH	IEET 1/5

### ADMINISTRATION, COMMUNITY FACILITIES, MISSION SUPPORT

LOCATION	LUMINAIRE TYPE	MOUNTING HEIGHT	POLE TYPE	SPACING	LAMP TYPE
PARKING LOTS LARGE > 40 BAYS	CA	40'	М	120'	HPS, MV
PARKING LOTS SMALL	CD, CS	25'	М	90'	HPS. MV
PARKWAYS/HIGHWAYS	U	40'	M	120'	HPS
PRIMARY 4 LANE/DIVIDED	CD	4 û	М	120'	HPS. MV
PRIMARY/4 LANE/UNDIVIDED	c s	I 40'	ī M	120'	HPS. MV
SECONDARY/P LANE	C S	25'	. М	120'	HPS, MV
TERTIARY/S LANEAC"LINE, SAC	CS	20'	M	120′	HPS. MV
SIDEWALKS	CS, B	15'	M, B	<i>እ</i> ഗ'	IVI AAA J
RAMPS & STEPS	CA, B, FW	VARIES	hl. B	VARIES	MH,
PLAZAS	CA, B	15'	<u>м, в</u>	<u>VA</u> RIES	MH, I
BUILDING ENTRANCES	-	-			MHI
SIGNS	SP	VARIES			MH, MV, I
MEMORIALS & MONUMENTS	SP	VARIES	-	VARIES	MH, MV, I
BUILDING DISPLAY	SP, CB	VARIES	-	VARIES	MV. MH
TRAINING AREAS	U	*	M, w	VARIES	HPS. MV
STORAGE AREAS	Ü	*	M, W	VARIES	HPS. MV
SERVICE/MAINTENANCE AREAS	U, CB. CA	*	<u>M, W</u>	VARIES	HPS, MV
RECREATION	U	*	W	VARIES	HPS, MV
FENCE PERIMETERS	-	-	-	-	_
AIRFIELD	CA, U, B	25'	M, W	VARIES	HPS, MH

#### LUMINAIRE TYPE

CS-Cut off, single mount CD-Cut off, double mount

CA-Cut off, single, double and 4 lamp mount

CB-Cut off, building mount

SP-Spot

B-Bollard

U-Utility, styles vary

FW-Flush wall mount

#### MOUNTING HEIGHT

★ -To be determined by type of fixture

POLE TYPE

M-Metal

W-Wood

B-Bollard

### LAMP TYPE

HPS-High pressure sodium

MH-Metal halide

MV-Color corrected mercury vapor

I-Incandescent

7.5.1 ADM, CF, MS

AR LA CE ME SE EE

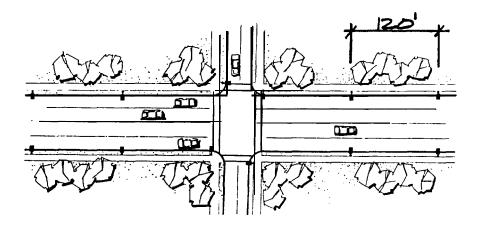
**LOCATION & SPACING** 

**SHEET 2/5** 

### STREET LIGHT LOCATION

The placement of light poles along streets will be coordinated with street tree spacing so that light poles are centered between trees. Light poles will be placed a minimum of two feet back from the street curb. It is undesirable to locate poles in turf areas due to the increase in maintenance. Place poles in planted areas or in paved areas when possible.

### PRIMARY. 4 LANE / UNDIVIDED



SINGLE MOUNT CUT OFF FIXTURE, PAIRED **ON** BOTH SIDES OF STREET At these intersections, each corner will have a single mount pole anchored in sidewalk paving. Poles along the street will be placed in the planting strip between the street curb and sidewalk.

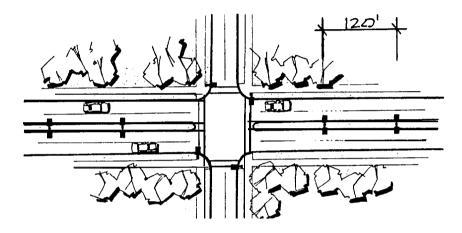
7.5.1 ADM, CF, MS

AR LA CE ME SE EE

**LOCATION & SPACING** 

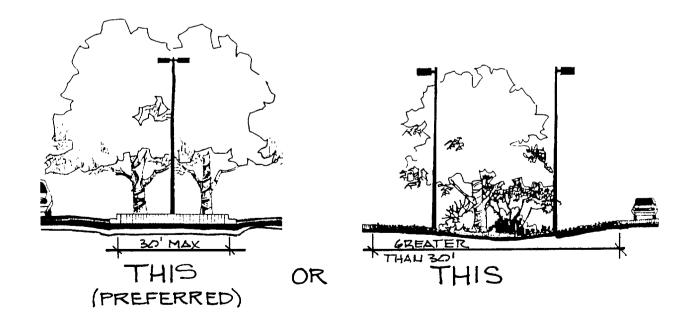
**SHEET 3/5** 

### PRIMARY 4 LANE / DIVIDED



DOUBLE MOUNT CUT OFF FIXTURE, DOWN CENTER OF MEDIAN

If the median is too wide for such an arrangement, two single mount poles may be used in pairs on either side of the median. Single mount lights will be used at each corner of the intersection.

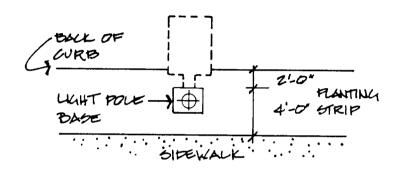


7.5.1 ADM, CF, MS

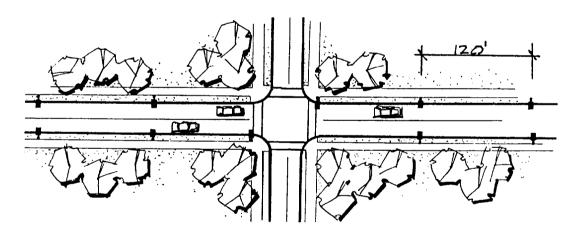
AR LA CE ME SE EE

**LOCATION & SPACING** 

**SHEET 4/5** 



### SECONDARY 2 LANE



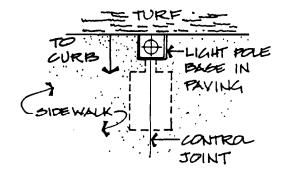
SINGLE MOUNT CUT OFF FIXTURE, PAIRED ON BOTH SIDES OF STREET
At this intersection, two corners will have single mount poles anchored in sidewalk paving. Along the street, poles will be placed in planting strip between street curb and sidewalk.

**7.5.1** adm, cf, ms

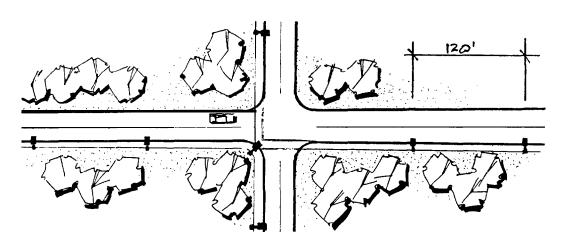
AR LA CE ME SE EE

**LOCATION & SPACING** 

**SHEET 5/5** 



TERTIARY. 2 LANE & CUL DE SAC



SINGLE MOUNT CUT OFF FIXTURE, **ON**ONE SIDE OF STREET ONLY
If the street has a sidewalk, lights will be placed in paving flush against back edge of sidewalk. Crosswalks will be lit from a pole placed on one corner behind the walk.

7.5.2 HSG

AR	LA	CE	ME	SE	EE

## **LOCATION & SPACING**

## **SHEET 1/3**

### **HOUSING**

LOCATION	LUMINAIRE TYPE	MOUNTING I HEIGHT	POLE TYPE	SPACING	LAMP TYPE
PARKING LOTS LARGE > 40 BAYS	CA	40'	M	120'	HPS, MV
PARKING LOTS SMALL ≤ 40 BAYS	CD, CS	25'	M	90'	HPS. MV
PARKWAYS/HIGHWAYS		_	-		
PRIMARY/4 LANE/DIVIDED	CD	40'	M	120'	HPS, MV
PRIMARY/4 LANE/UNDIVIDED	c s	40'	M	120′	HPS, MV
SECONDARY/P LANE	C S	25'	M	120'	HPS, MV
TERTIARY/2 LANE/CUL DE SAC	CS	20'	M	120'	HPS, MV
SIDEWALKS	cs, B	15'	M, B	90'	MH, I
RAMPS & STEPS	CA, B, FW	VARIES	M, B	VARIES	MH, I
PLAZAS	CA, B	15'	M, B	VARIES	MH, I
BUILDING ENTRANCES	•	_	-	-	~
SIGNS	SP	VARIES	-	-	MV, I
MEMORIALS & MONUMENTS	SP	VARIES	-	VARIES	MV, MH, I
BUILDING DISPLAY			-	-	_
TRAINING AREAS	~		-	-	-
STORAGE AREAS	_		-	-	_
SERVICE/MAINTENANCE AREAS	•••	-		-	-
RECREATION	U	*	W	VARIES	HPS, MV
FENCE PERIMETERS			-	_	-
AIRFIELD	IRFIELD .			_	-
I					

### LUMINAIRE TYPE

CS-Cut off, single mount CD-Cut off, double mount

CA-Cut off, single, double and 4 lamp mount

CB-Cut off, building mount

SP-Spot

B-Bollard

U-Utility, styles vary FW-Flush wall mount

#### MOUNTING HEIGHT

**★ - To** be determined by type of fixture

#### POLE TYPE

M-Metal W-Wood B-Bollard

#### LAMP TYPE

HPS-High pressure sodium

MH-Metal halide

MV-Color corrected mercury vapor

I-Incandescent

7.5.2 HSG

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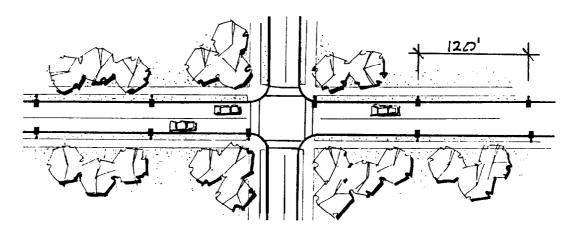
## **LOCATION & SPACING**

**SHEET 2/3** 

#### STREET LIGHT LOCATION

The placement of light poles along streets will be coordinated with street tree spacing so that light poles are centered between trees. Light poles will be placed a minimum of two feet back from the street curb. It is undesirable to locate poles in turf areas due to the increase in maintenance. Place poles in planted areas or in paved areas when possible.

### **SECONDARY 2 LANE**



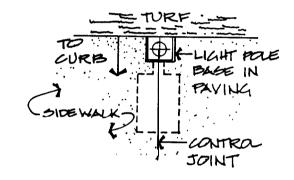
SINGLE MOUNT CUT OFF FIXTURE, PAIRED ON BOTH SIDES OF STREET
At these intersections, two corners will have single mount poles anchored in sidewalk paving. Poles along the street will be placed in planting strip between street curb and sidewalk.

7.5.2 HSG

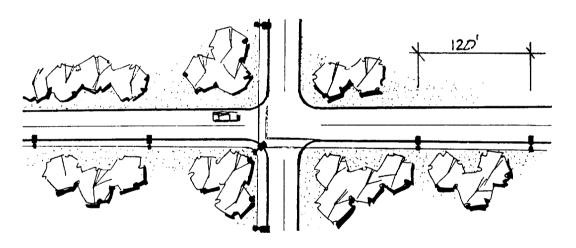
AR LA CE ME SE EE

**LOCATION & SPACING** 

SHEET 3/3



TERTIARY. 2 LANE & CUL DE SAC



SINGLE MOUNT CUT OFF FIXTURE, ON ONE SIDE OF STREET ONLY

If the street has a sidewalk, lights will be placed in paving flush against back edge of sidewalk. Crosswalks will be lit from a pole placed on one corner behind the walk,

7.5.3

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### **LOCATION & SPACING**

**SHEET 1/2** 

### **INDUSTRIAL**

LOCATION	LUMINAIRE TYPE	MOUNTING HEIGHT	POLE TYPE	SPACING	LAMP TYPE
PARKING LOTS LARGE > 40 BAYS	U, CA	40'	W, M	120'	HPS. MV
PARKING LOTS SMALL ≤ 40 BAYS	U, CD, CS	25′	W, M	90'	HPS, MV
PARKWAYS/HIGHWAYS	U	40'	M	120'	HPS
PRIMARY/4 LANE/DIVIDED	CD	40′	M	120'	HPS. MV
PRIMARY/4 LANE/UNDIVIDED	CS	40'	M	120′	HPS, MV
SECONDARY/2 LANE	CS	25′	M	120'	HPS, MV
TERTIARY/2 LANE/CUL DE SAC	CS	20'	M	120'	HPS, MV
SIDEWALKS	CS, B	15'	М, В	90'	MH, I
RAMPS & STEPS	CA, B, FW	VARIES	M, B	VARIES	MH, I
PLAZAS	CA, B	15'	М, В	VARIES	MH, I
BUILDING ENTRANCES	U	VARIES			MH, I
SIGNS	ŞP	VARIES			MH, MV, I
MEMORIALS & MONUMENTS	SP	VARIES		VARIES	MH, MV, I
BUILDING DISPLAY	-	-			
TRAINING AREAS	<u>-</u>	-	-		
STORAGE AREAS	U	*	M, W	VARIES	HPS,
SERVICE/MAINTENANCE AREAS		*	<u>M, w</u>	VARIES	HPS
RECREATION	U	*	W	VARIES	HPS. MV
FENCE PERIMETERS	U	* _	W	VARIES	HPS
AIRFIELD					
					_
					_
<i>}</i>				_	

### LUMINAIRE TYPE

CS-Cut Off) single mount CD-Cut off, double mount

CA-Cut off, single, double and 4 lamp mount

CB-Cut off, building mount

SP-Spot

B-Bollard

U-Utility, styles vary FW-Flush wall mount

#### MOUNTING HEIGHT

★ - To be determined by type of fixture

#### POLE TYPE

M-Metal W-Wood B-Bollard

### LAMP TYPE

'HPS-High pressure sodium

MH-Metal halide

MV-Color corrected mercury vapor

I-Incandescent

7.5.3

AR LA CE ME SE EE

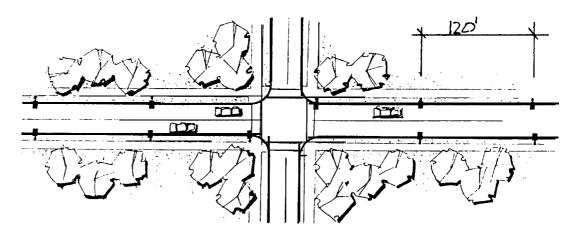
## **LOCATION & SPACING**

**SHEET 2/2** 

#### STREET LIGHT LOCATION

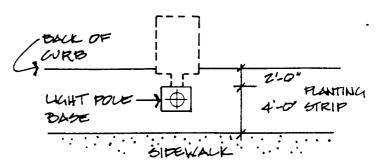
The placement of light poles along streets will be coordinated with street tree spacing so that light poles are centered between trees. Light poles wi 11 be placed a minimum of two feet back from the street curb. It is undesirable to locate poles in turf areas due to the increase in maintenance. Place poles in planted areas or in paved areas when possible.

### **SECONDARY 2 LANE**



### SINGLE MOUNT CUT OFF FIXTURE, PAIRED ON BOTH SIDES OF STREET

At these intersections, two corners will have single mount poles anchored in sidewalk paving. Poles along the street will be placed in planting strip between street curb and sidewalk.



# 7.5.4 os

# 7. Utilities & Lighting

AR LA CE ME SE EE

## **LOCATION & SPACING**

SHEET 1/5

### **OPEN SPACE**

LOCATION	LUMINAIRE TYPE	MOUNTING HEIGHT	POLE TYPE	SPACING	LAMP TYPE
PARKING LOTS LARGE > 40 BAYS		40'	М	120'	HPS, MV
PARKING LOTS SMALL ≤ 40 BAYS	CD, CS	25'	М	90'	HPS, MV
PARKWAYS/HIGHWAYS	Ü	40'	М	120'	HPS
PRIMARY/4 LANE/DIVIDED	CD	40'	М	120'	HPS, MV
PRIMARY/4 LANE/UNDIVIDED	CS	40'	М	120'	HPS, MV
SECONDARY/2 LANE	CS	25'	М	120'	HPS, MV
TERTIARY/2 LANE/CUL DE SAC	CS	20'	M	120'	HPS, MV
SIDEWALKS	CS, B	15'	M, B	90'	MH, I
RAMPS & STEPS	CA, B, FW	VARIES	M, B	VARIES	MH. I
PLAZAS	CA, B	15'	M, B	VARIES	мн, і
BUILDING ENTRANCES	_		-		-
SIGNS	SP	VARIES	-		MH, MV, I
MEMORIALS & MONUMENTS	SP	VARIES	-	VARIES	MH, MV, I
BUILDING DISPLAY	-	-	-	-	_
TRAINING AREAS	U	*	M, W	VARIES	HPS, MV
STORAGE AREAS	U	*	M, W	VARIES	HPS, MV
SERVICE/MAINTENANCE AREAS	U, CB, CA	*	M, W	VARIES	HPS, MV
RECREATION	C	*	W	VARIES	HPS, MV
FENCE PERIMETERS	CA, U	25′	M, W	90'	HPS, MH
AIRFIELD	CA, U, B	25'	M, W	VARIES	HPS, MH

### LUMINAIRE TYPE

CS-Cut off, single mount CD-Cut off, double mount

CA-Cut off, single, double and 4 lamp mount

CB-Cut off, building mount

SP-Spot

B-Bollard

U-Utility, styles vary FW-Flush wall mount

### MOUNTING HEIGHT

★ - To be determined by type of fixture

### POLE TYPE

M-Metal

W-Wood

B-Bollard

#### LAMP TYPE

HPS-High pressure sodium

MH-Metal halide

MV-Color corrected mercury vapor

I-Incandescent

7.5.4 os

AR LA CE ME SE EE

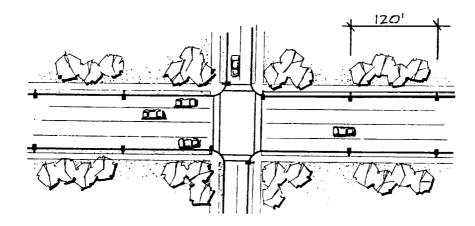
**LOCATION & SPACING** 

**SHEET 2/5** 

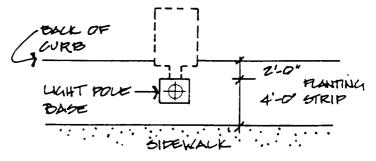
### STREET LIGHT LOCATION

The placement of light poles along streets will be coordinated with street tree spacing so that light poles are centered between trees. Light poles will be placed a minimum of two feet back from the street curb. It is undesirable to locate poles in turf areas due to the increase in maintenance. Place poles in planted areas or in paved areas when possible.

### **PRIMARY 4 LANE / UNDIVIDED**



SINGLE MOUNT CUT OFF FIXTURE, PAIRED ON BOTH SIDES OF STREET
At these intersections, each corner will have a single mount poles anchored in sidewalk paving. Poles along the street will be placed in planting strip between street curb and sidewalk.



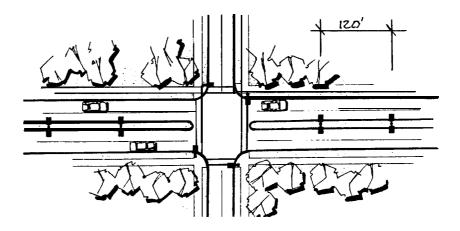
7.5.4 os

AR LA CE ME SE EE

**LOCATION & SPACING** 

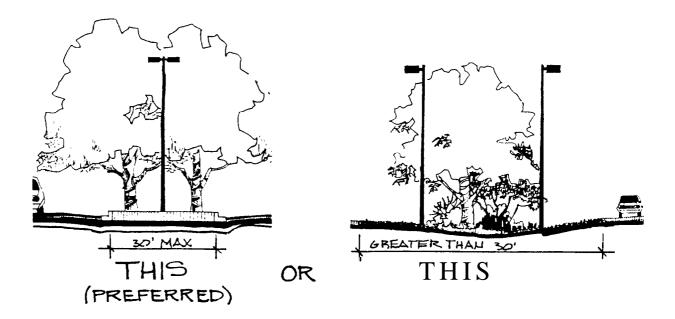
**SHEET 3/5** 

### PRIMARY 4 LANE / DIVIDED



DOUBLE MOUNT CUT OFF FIXTURE, DOWN CENTER OF MEDIAN

If the median is too wide for such an arrangement, two single mount poles may be used in pairs on either side of the median. Single mount lights will be used at each corner of the intersection.

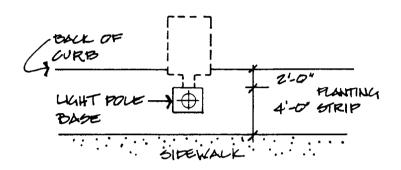


7.5.4 os

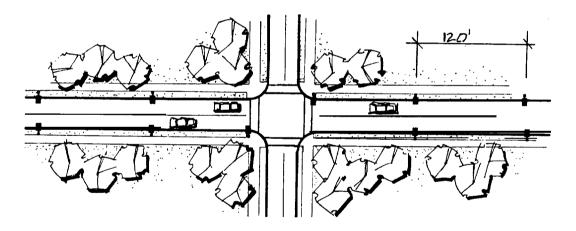
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**LOCATION & SPACING** 

**SHEET 4/5** 



### SECONDARY. 2 LANE



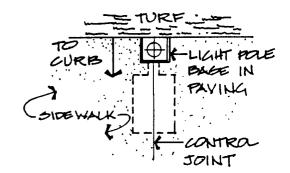
SINGLE MOUNT CUT OFF FIXTURE, PAIRED ON BOTH SIDES OF STREET
At this intersection, two corners will have single mount poles anchored in sidewalk paving. Poles along the street will be placed in planting strip between street curb and sidewalk.

7.5.4 os

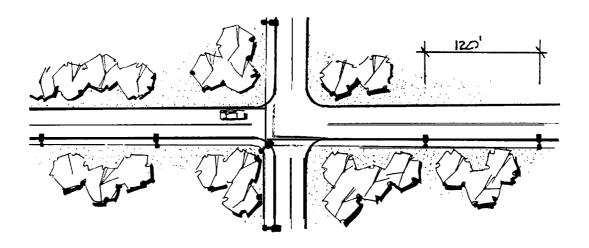
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**LOCATION & SPACING** 

**SHEET 5/5** 



TERTIARY.2 LANE & CUL DE SAC



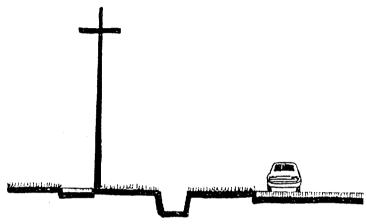
SINGLE MOUNT CUT OFF FIXTURE, ON ONE SIDE OF STREET ONLY

If the street has a sidewalk, lights will be placed in paving flush against back edge of sidewalk. Crosswalks will be lit from a pole placed on one corner behind the walk.

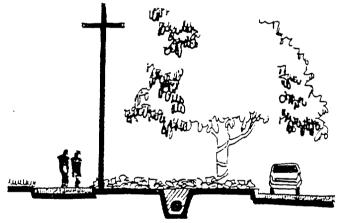
7.6.1 ADM, CF, MS

AR LA CE ME SE EE

## **SWALES & CHANNELS**

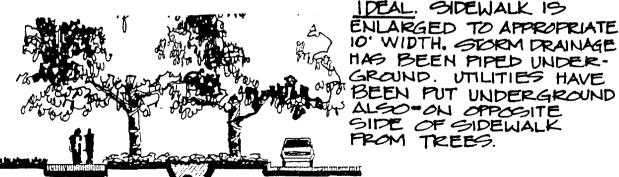


EXISTING. THERE ARE A
LOT OF OPEN DRAINAGE
CHANNELS AT FORT GORDON.
THESE OPEN DITCHES
ARE DANGEROUS, THEY
ALSO HAVE EROSION
PROBLEMS AND REQUIRE
RECURRENT AND COSTLY
MAINTENANCE.



15 UTILITIES

IMPROVEMENT. STORM
DRAINAGE IS PIPED
UNDERGROUND SIDEWALK
WIDENED AND STREET
TREES GIVE SPATIAL
DEFINITION TO STREET



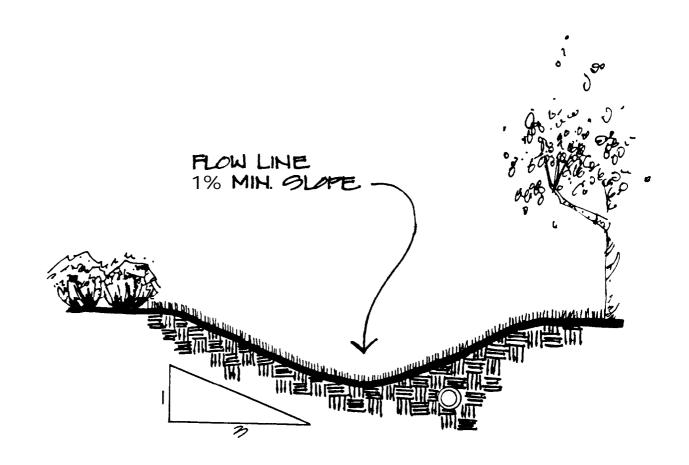
7.6.2 hsg, os, ind

AR LA CE ME SE EE

**SWALES & CHANNELS** 

**SHEET 1/2** 

SWALES SHOULD BE DESIGNED WITH A MAXIMUM SLOPE OF 3:1 TO ALLOW EASY ACCEOS FOR MAINTENANCE AND REPAIR VEHICLES. THE FLOW LINE OF THE SWALE SHOULD BE A MINIMUM OF A 1% SLOPE.



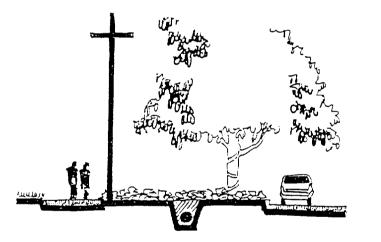
7.6.2 HSG, OS, IND

AR LA CE ME SE EE

#### **SWALES & CHANNELS**

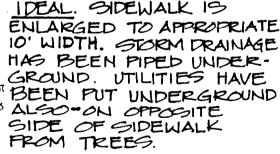
#### SHEET 2/2

EXISTING. THERE ARE A
LOT OF OPEN DRAINAGE
CHANNELS AT FORT GORDON.
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UTILITIES

IMPROVEMENT. STORM
DRAINAGE B PIPED
UNDERGROUND SIDEWALK
WIDENED AND STREET
TREES GIVE SPATIAL
DEFINITION TO STREET



7 . 7 . 1 **adm, cf, ms**, hsg, os, ind

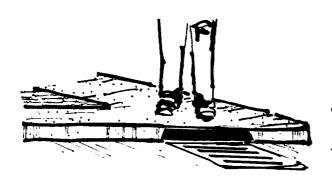
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**GRATES & INLETS** 

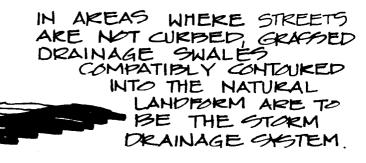
**SHEET 1/2** 



ANY STREET WITH CURBING WILL HAVE AN UNDERGROUND STORM DRAINAGE SYSTEM. THE USE OF 'DUTCH' OR FRENCH' DRAINS IS ENCOURAGED.



POSITION DRAINAGE GRATES OUT OF PEDESTRIAN PATHS, ALSO CHECK WIDTH OF OPENINGS AS A SAFETY PRECAUTION. TO PREVENT INJURY TO PEDESTRIANS OR CYCUISTS.



7.7.1
ADM, CF, MS, HSG, OS, IND

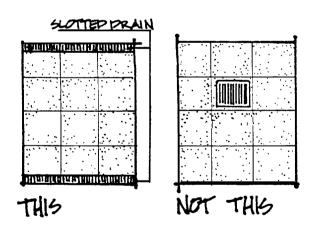
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**GRATES & INLETS** 

**SHEET 2/2** 

THE SIZE, PLACEMENT, AND SPACING OF DRAIN INLETS SHOULD BE CONSIDERED SO THAT THESE ELEMENTS DO NOT DETRACT FROM THE OVERALL DESIGN. DRAIN INLETS SHOULD BE WORKED INTO THE PAVING PATTERN WHENEVER POSSIBLE. GRATE INLETS WILL NOT PRESENT A HAZZARD TO FOOT OR BIKE TRAFFIC.





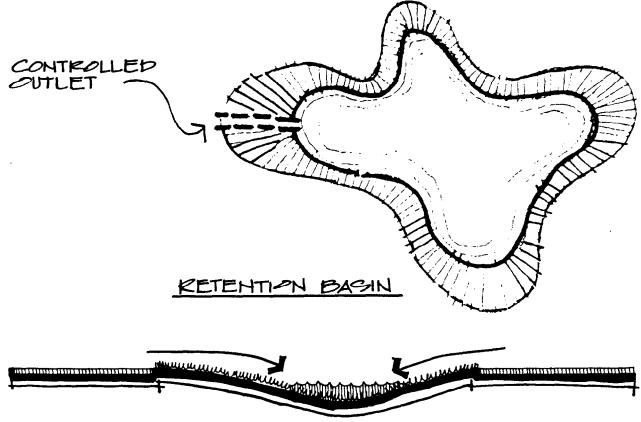
DRAIN GLOTS PERPENDICULAR TO CURP.

7.8.1 adm, cf, ms, hsg, os, ind

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#### RETENTION BASINS

Each project should be designed so that the surface water leaving the site after the project is complete is not significantly greater than that leaving prior to development of the site. Retention ponds or basins collect storm water runoff and then release it slowly over a period of time so the ground may absorb the water more thoroughly. These basins should be incorporated into the design of the drainage channels. Large retention basins are to be designed so that during normal or dry stages these areas may be used for other purposes or at least be visually unoffensive; therefore these structures should be planted in grass. To insure a good grass stand, the basin must be carefully graded to insure uniform surface drainage. The retention basin may be used for sediment control. If sedimentation is a major problem, sediment traps are to be installed.



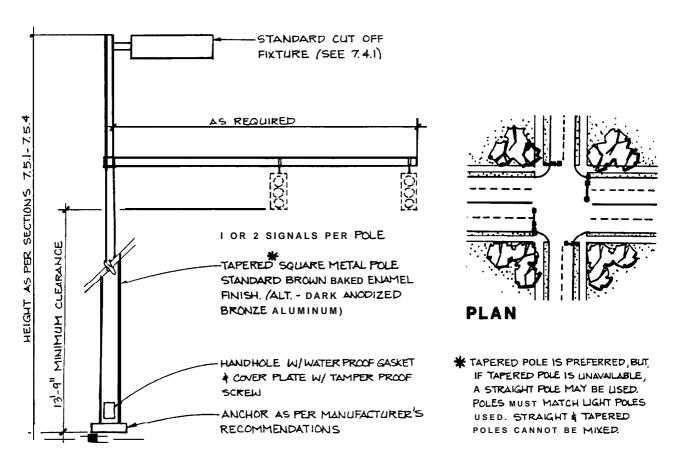
ROAD MEDIANS MAY BE USED FOR TEMPORARY OTORAGE OF WATER.

7.9.1 ADM, CF

AR LA CE ME SE EE

#### TRAFFIC SIGNALS

This traffic light pole is the only one allowed in the Administration and Community Facilities areas. It will also be used in all areas where the utilities are buried underground. At intersections with traffic signals this pole will be used instead of the standard light pole. The standard cut off luminaire fixture will be mounted at the correct height on each pole. Pole will be placed flush against edge of sidewalk furthest from the street. All poles must be placed a minimum of two feet back from street curb. Poles should not be placed in middle of sidewalk or in turf areas. Place poles in planted areas or at edge of paved areas only. Pole will be of sufficient size and strength to support needed traffic signals without being guyed or staked.



MAST ARM TRAFFIC SIGNAL & LIGHT POLE

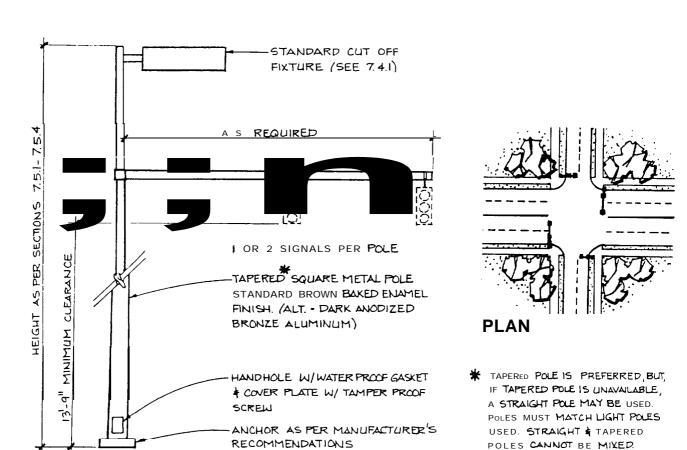
7.9.2 MS, HSG, OS, IND

AR LA CE ME SE EE

#### TRAFFIC SIGNALS

**SHEET 1/2** 

This standard traffic light pole is to be used in all areas where the utilities are buried underground. At intersections with traffic signals this pole will be used instead of the standard light pole. The standard cut off luminaire fixture will be mounted at the correct height on each pole. Pole will be placed flush against edge of sidewalk furthest from the street. All poles must be placed a minimum of two feet back from street curb. Poles should not be placed in middle of sidewalk or in turf areas. Place poles in planted areas or at edge of paved areas only. Pole will be of sufficient size and strength to support needed traffic signals without being guyed or staked.



MAST ARM TRAFFIC SIGNAL & LIGHT POLE

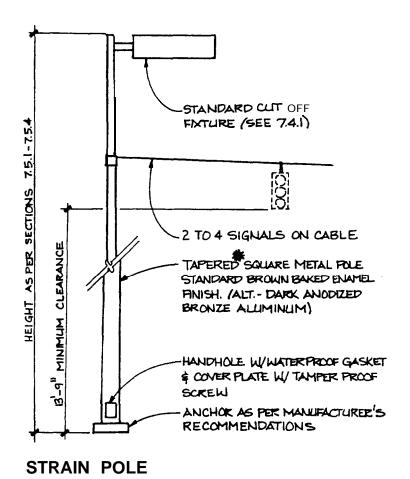
**7.9.2** MS, HSG, OS, IND

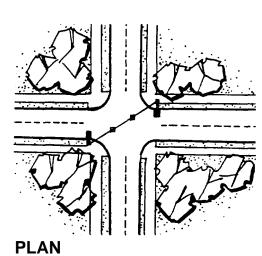
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#### TRAFFIC SIGNALS

SHEET 2/2

This pole will be used to support traffic signal cables at all intersections where utilities are above ground except in Administration and Community Facilities areas. Pole will be of sufficient size and strength to support the needed traffic signals without being guyed or staked. Two poles will be used at each intersection at opposite corners. Pole will be topped with a standard cut off luminaire fixture. A cable will be stretched between the two poles and the necessary traffic signal fixtures will be hung from this cable. Regular light poles with the standard cut off luminaire fixture will be used on the other two corners. All poles will be placed at least two feet back from street curb. Poles should not be placed in middle of sidewalk or in turf areas. Place poles in planted areas or at edge of paved areas only.





TAPERED POLE IS PREFERRED, BUT,
IF TAPERED POLE IS UNAVAILABLE,
A STRAIGHT POLE MAY BE USED.
POLES MUST MATCH LIGHT POLES
USED. STRAIGHT & TAPERED
POLES CANNOT BE MIXED.

7.10.1 ADM, CF, MS, HSG, OS, IND

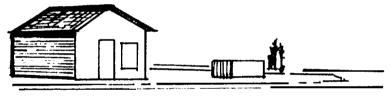
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#### **UTILITY STRUCTURES**

#### **SHEET 1/2**

Utility systems on Post are essential. At Fort Benning these systems generally align with the road network and are highly visible. Above ground utility structures will not be located in visually prominent locations. When siting these structures the designer will make use of plant material, topography and/or architectural walls or screens to mitigate these structure's impact on their environment.

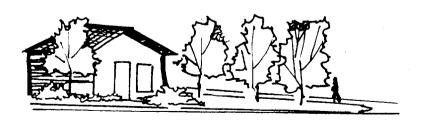
The amount of screening these structures receive will vary from little to none in the Industrial Zone to very well screened in the Administration Zones. All utility structures on Post are to be painted a dark brown so they will recede into their environment. Every at tempt should be made to locate vents and structures in areas that can be incorporated into the surrounding grounds.



GTENCTURE ON CORNER. 19 VERY VISABLE -DETRACTO FROM THE BUILDING



SIMPLY PLACING THE STRUCTURE NEAR THE BUILDING HELPS THE VISUAL ENVIRONMENT.



LANDSCAPING ESSENTIALLY
HIDES THE STRUCTURE
AND CREATES A
PLEASANT STREET
SCAPE FOR THE
PEDESTRAIN.

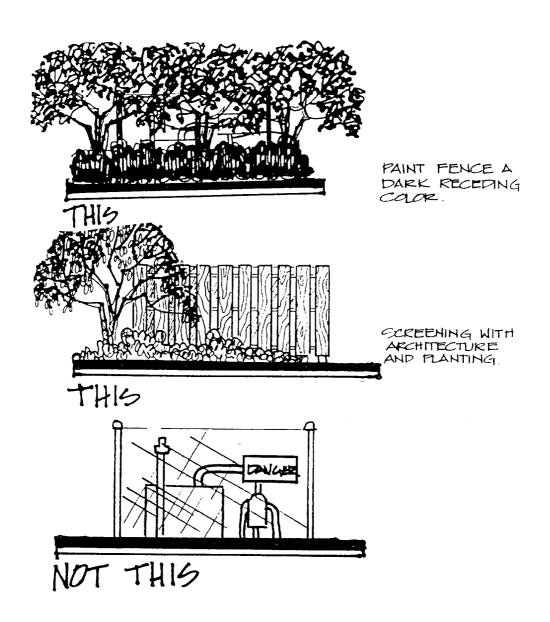
7.10.1 ADM, CF, MS, HSG, OS, IND

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#### **UTILITY STRUCTURES**

**SHEET 2/2** 

Surface equipment will be screened with landscaping, fencing, walls, and/or any combination of these.



7.11.1

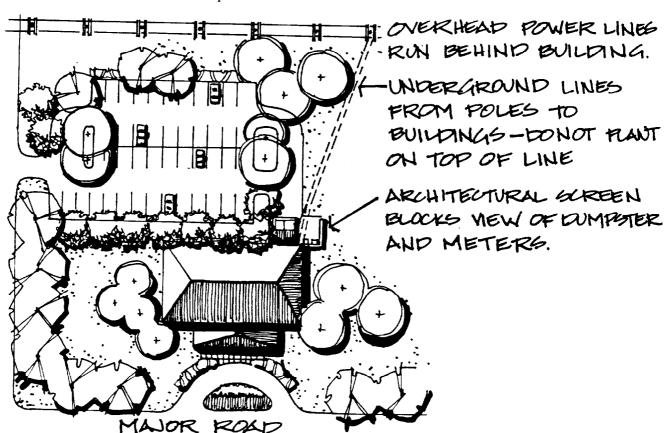
ADM, CF. MS. HSG. OS. IND

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#### **HOOK UPS**

Utility systems provide the basic infrastructure of power, communication, water, and sewer services for the operation of the Post. Unsightly overhead utilities should be relocated underground wherever possible, if underground distribution cannot be justified, the designer will minimize the detrimental visual impact through proper location, screening, and detailing. utility lines should be grouped whenever possible and they will be routed to the backside of buildings. Lines will not run immediately adjacent to major roads.

Lines which come from the main lines to the buildings will preferably be located underground, if overhead, they will be located out of the main public visibility area or screened to be as unobtrusive as possible. Meters, both gas and water, will be located at grade or upon the bui-lding in areas of low visibility but with easy access. These elements are to be screened with architectural or landscape elements.



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Utilities are located on site in such a manner as to provide adequate service at minimum cost. If utilities are located in this vault under the sidewalk it will lower excavation costs, and maintenance is simplified. The designer should check local codes to determine what utilities may be placed in this utility vault.

